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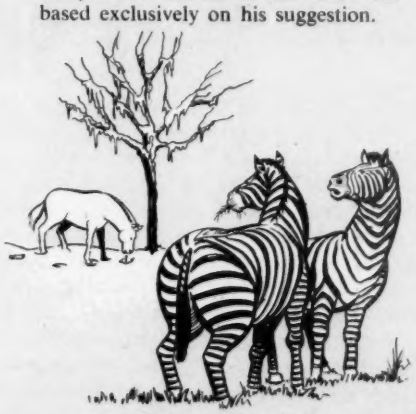
LETTERS TO THE EDITOR

FROZEN FIELDS

Sir: *In your reply to TSgt. Daughtery in the July letters column, you stated that the promotion system under discussion "appears to make the written examination score the sole determining factor in the achievement of promotion." It also indicated that Sergeant Daughtery's letter recommended adoption of the Navy promotion system. If this is true, the statement cited above is false as the Navy system is a well-rounded one and includes knowledge, performance, and numerous other qualifications as well.*

SSgt. Thomas A. Hill, Jr.
Westover AFB, Mass.

The letter in question did not state that USAF should adopt the Navy promotion system. Sergeant Daughtery's suggestion was based on a system "similar" to that used by the Navy. The answer to the letter was based exclusively on his suggestion.



"He's in a frozen field."

Sir: *Could you please tell me why the Air Force is so reluctant to make changes in the present promotion system? In my opinion, it is lacking, yet nothing constructive is being done to alleviate the problem.*

A/1C Francis Wilton
APO 924, San Francisco, Calif.

Contrary to this allegation, evidence seems to indicate that USAF officials are making every effort to solve a complex problem. An extensive retraining program has been in effect for two years and more than 25,000 men have been channeled from surplus into understaffed skilled areas. Secondly, the establishment of the Quality Control Program was aimed directly at

(Continued on page 30)

"A Merry Christmas!"

During this month of December, Air Force men with their families and friends around the globe will exchange the traditional greeting as the Christian world celebrates its greatest religious festival. From Nome in Alaska to Adana, Turkey, and from Iceland to the islands of the South Seas, Air Force chaplains will conduct services for the faithful in commemoration of the birth of Christ, He who gives inspiration and meaning to the way of life to which we are dedicated.

It is a part of the significance of the holy Christmas season that we are all more conscious of family ties at this time of year, and of the pleasant associations we identify with Christmas in the family circle. The memories of Christmas in childhood are particularly precious, and this enduring regard for the importance of the family unit is a vital characteristic of our National culture.

"Home for Christmas" is a thought with a certain magic about it. It can be detected in the charged atmosphere of railroad stations and airline terminals as the season approaches. You can hear it in the ringing of church bells, and it becomes clearer with each Sunday as December advances. Most of all it can be felt in the heart as the warmth of spiritual serenity crowds out everything that is ugly or unworthy. Observance of the holiness of Christmas in the church and in the home is the highest expression of the Christian ethos built on the indestructible foundation of His teaching.

Unfortunately, because of the nature of their profession, only a very small percentage of airmen will know the joy of spending Christmas at home. The eyes of radar must never close, and the aircraft must be fueled, alert, and ready to fly—even on Christmas Day. Many of those fortunate enough to have wives and children close at hand may feel a sense of something missing as they observe Christmas in strange surroundings. The man who remembers the walk to church on Christmas morning over crisp, fresh snow in the clear air of New England will somehow feel that tropic palms and sun-drenched sands are incongruously out of place.

It is small wonder that the airman standing guard at a lonely Arctic outpost or sweltering in the heat of a desert sun may pause to ask himself: "What am I doing here at Christmas? What cosmic accident, what juggling of life's circumstances placed me—John Smith of Main Street, U. S. A.—here in this forsaken place thousands of miles from home?" It is a legitimate, understandable question. It is likely that the same question was raised by some of the men who spent Christmas at Valley Forge in the winter of 1777.

THE ULTIMATE WEAPON

by Chaplain (Maj. Gen.) Terence P. Finnegan
Chief of Air Force Chaplains

APART entirely from his interest in his own particular specialty, every man in the Air Force knows something about the part he plays in the larger drama now occupying the attention of the world. Dozens of sources from as many different directions pour forth a constant stream of information on the nature of the ideological conflict between Communism and Democracy. The result of the contest will have a profound effect on the future of the entire civilized world. Some of the issues are simple, readily understood. Others are more complex, steeped as they are in philosophical concepts.

As the primary military instrument of United States policy, it is the function of the Air Force to insure that the conflict of ideologies is not expressed in the violence of war. By maintaining a sophisticated degree of combat-readiness, we hope to deter the adversary from pursuing his aims by military action. But nothing could be more dangerous to the future security of our Nation and the peace of the world than the belief that our greatest strength lies in nuclear weapons or any other form of force. If we believe this, we can too easily drift into the belief that we are safe and secure behind such a bulwark.

Despite the tremendous importance of the aerospace power structure as a means of preventing war, we cannot buy true peace with military power. We can only buy the precious opportunity to work for peace. True peace can be brought about only by the growth and fruition of ideals in the hearts of men. The spiritual and intellectual field is the real battleground upon which the future of the world will ultimately be decided. Whether one chooses to call it "Cold War" or by some other name, the era of active combat is already under way and has been for a number of years. Unfortunately, the extent of its duration in the future cannot yet be determined.

Basically, the opposition of the two systems is founded on denial by Communism of the principles upon which our social system is organized—a system predicated on the fundamental belief in God and in the integrity of each human being.

Why do we of the United States place such store by the American system? Why do we believe in the primary importance of freedom of religion, and of thought, and of speech? Why do we admire individual initiative, and resent any but the most necessary interference by government in our affairs? These are some of the characteristics of democracy as practiced in the United States.

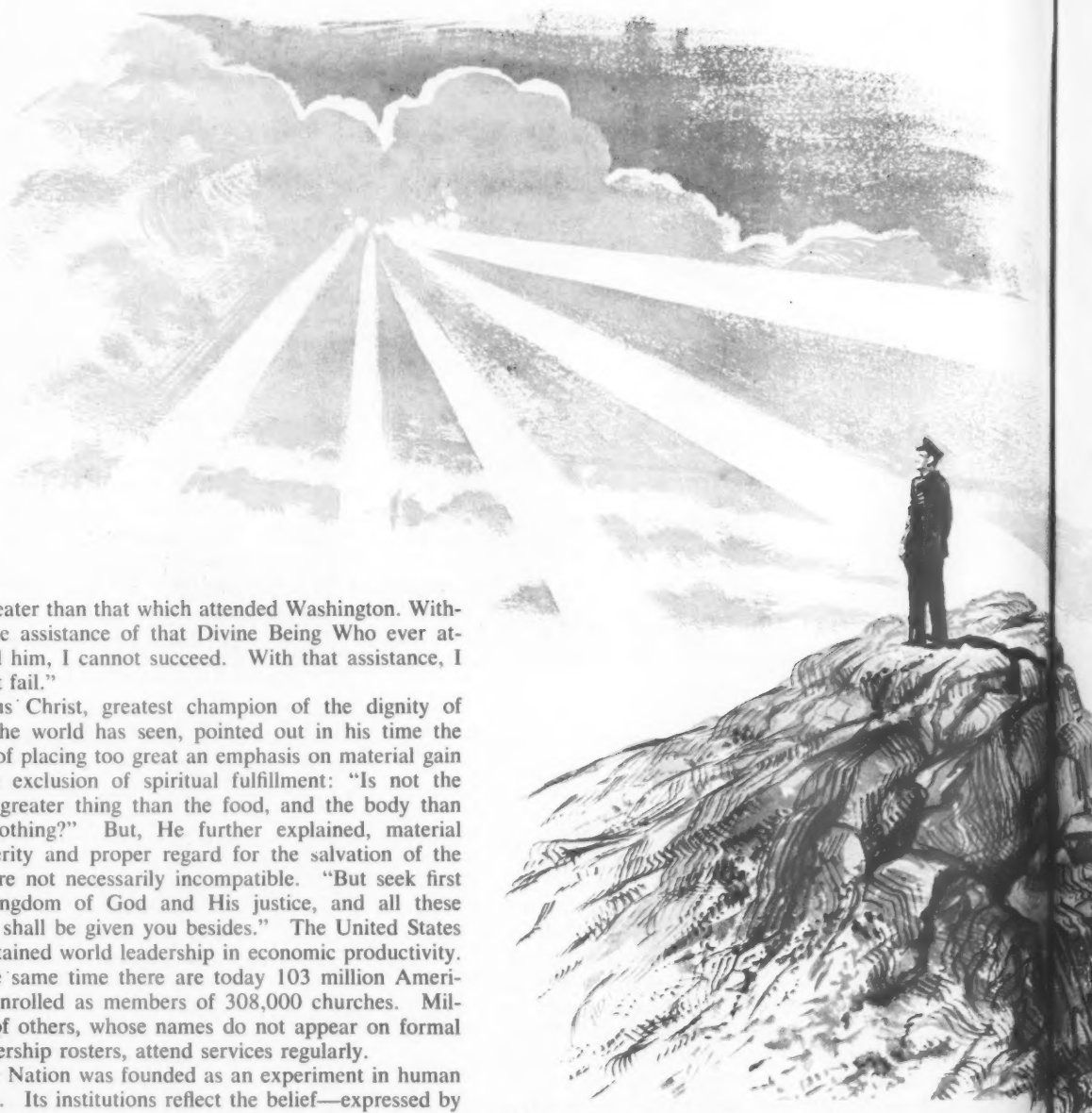
The Truths We Hold

"We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the pursuit of Happiness. That to secure these Rights, Governments are instituted among Men, deriving their just powers from the consent of the governed."

The self-evident truths carefully inscribed by Jefferson's pen on the Declaration of Independence are further spelled out in the Constitution and the Bill of Rights. These documents are the bedrock of modern democracy. Man's unalienable rights include freedom of speech, freedom of assembly, freedom of the press, and freedom to worship as he pleases, whether as Catholic, Protestant, Jew, Moslem, or other school of thought. This revolutionary concept recognized the dignity and equality of man—not only in the sight of God—but politically and socially as well.

In the development of our National culture to the present time, the spiritual motivation of religion has exercised a profound influence on the path of progress. The road has not always been smooth, and many of the obstacles were formidable. But Americans and American leadership have always looked toward the fundamental acknowledgement of God and His wisdom to sustain them during times of stress. It is a characteristic of American statesmanship that religious morality has always played a large part in major decisions affecting the National welfare.

When President Lincoln departed from Springfield to face the task of saving the Union he shared this thought with old friends. "I now leave, not knowing when or whether ever, I may return, with a task before



me greater than that which attended Washington. Without the assistance of that Divine Being Who ever attended him, I cannot succeed. With that assistance, I cannot fail."

Jesus Christ, greatest champion of the dignity of man the world has seen, pointed out in his time the error of placing too great an emphasis on material gain to the exclusion of spiritual fulfillment: "Is not the life a greater thing than the food, and the body than the clothing?" But, He further explained, material prosperity and proper regard for the salvation of the soul are not necessarily incompatible. "But seek first the kingdom of God and His justice, and all these things shall be given you besides." The United States has attained world leadership in economic productivity. At the same time there are today 103 million Americans enrolled as members of 308,000 churches. Millions of others, whose names do not appear on formal membership rosters, attend services regularly.

Our Nation was founded as an experiment in human liberty. Its institutions reflect the belief—expressed by our forefathers and shared by Americans today—that man has his origin and destiny in God. Human institutions—including government—are intended to help men develop their God-given possibilities as individuals, and to facilitate performance of moral obligations imposed by membership in a free society. Here in the United States the vision has been realized. Here there has been developed an area of spiritual, intellectual, and economic vigor—the like of which the world has never seen. It is founded on faith in man as an end in himself—a community of free individual citizens and free children of God.

Under Communism, the rights and liberties of the individual are subordinated to the interests of the State in every facet of national existence. The system is based on the primary importance of a continuing struggle to overcome opposition. Thus it becomes proper to make mass effort fundamental. This results in the demand that the individual surrender all independence of action and judgement. Eventually, this demand develops to the point where the very existence of individual personality becomes an obstacle to the power of the State. The goal of the State becomes the extinction of the sense of personality and its absorption into the collective will of the whole.

Since no man is free to work out his individual destiny under Communism, religion is accorded the status of an irrelevant distraction, detracting from efficiency and loyalty. God has been replaced in Russia by a Production Quota. "Have we suppressed the reactionary clergy?" said Stalin in 1927. "Yes, we have. The unfortunate thing is that it has not been

completely liquidated." The vestiges of religion remaining in the Soviet bloc continue to exist only because even the most ruthless tryant cannot erase the image of God in a mere 42 years.

Goal of Communism

Statesmen of the Western World are in general agreement that international communism has never deviated from its original goal of world domination. Modifications in tactics have occurred from time to time to meet changing opportunities, and the considerable progress by Communism in the direction of the ultimate objective is sobering.

The United States and its allies halted the tide of forcible encroachment against defenseless nations after World War II by arranging a series of alliances for mutual security and assuming a posture of realistic military preparedness. But the pressure continues along other avenues, and both overt and insiduously subtle techniques are employed.

Those countries in which the democratic system is firmly established and flourishing constitute one target for communist tactical action. Another is the group of uncommitted and underdeveloped nations poised at the point of decision in determining the future course of national existence. The newborn nations of Africa, the struggling republics of Southeast Asia, the uncertain political entities of the Middle East, the behemoth of India—all are facing problems of the utmost gravity compounded by population pressures and economic immaturity.

In which direction will they turn for help, for guidance, and inspiration? Will they heed the example of those nations which chose the path to Democracy and human dignity, or will they hear the siren song of Communism which offers a quick and easy road to economic emancipation—at a price?

Just as the devil tempted Jesus on the mountaintop saying, "All these things will I give thee, if thou wilt fall down and worship me," so the Communists approach their victims: "Give us your minds, your culture, your political allegiance, and your God. In exchange we will fill the bellies of your hungry children."

This is the nature of the conflict of ideologies. Fortunately for the future of humanity, the forces of Democracy are neither weak nor timid. The United States is possessed of great strength, and this strength —with the guidance of God—will insure the preservation of peace and a broadening of opportunity for men to pursue their destiny in freedom.

We are strong in military capability. The power of our aircraft and missiles protects us from intimidation by force or the threat of force. We are strong economically, and the United States has never been remiss in sharing the bounty of Providence with less fortunate peoples. We are strong politically, as like-minded Allies stand shoulder to shoulder in facing the issues at stake. But our greatest strength by far lies in the power engendered by individual freedom and dignity, in the moral stature of our people based on dedication to religious principles. This is the beacon—the Hallmark of Democracy—that will brighten the path of all men who seek liberty, opportunity, and peace with honor.

It is appropriate to reexamine these thoughts during the Christmas season—the festival of the Prince of Peace. By rededicating ourselves to the ideals based on His teachings, the light of inspiration can be made to shine a little deeper into the darkened corners of the world. Lasting peace is the most worthy aspiration of mankind, but there can be no true, enduring peace without freedom, dignity, and recognition for the rights of man.

President Eisenhower expresses the thought like this:

"The Christmas message of 'peace on earth, good will toward men' is not alone an ideal of Christianity. It is a basic aspiration of Christian, Jew, Moslem, Hindu, and Buddhist alike—of every person in the world who has faith in an Almighty God.

"It is not limited to us Americans or even to the people of the Free World. It is matched in yearning in the innermost thoughts of all peoples. It is a universal divine spark that lights the soul of mankind."

UNITING THE FREE WORLD

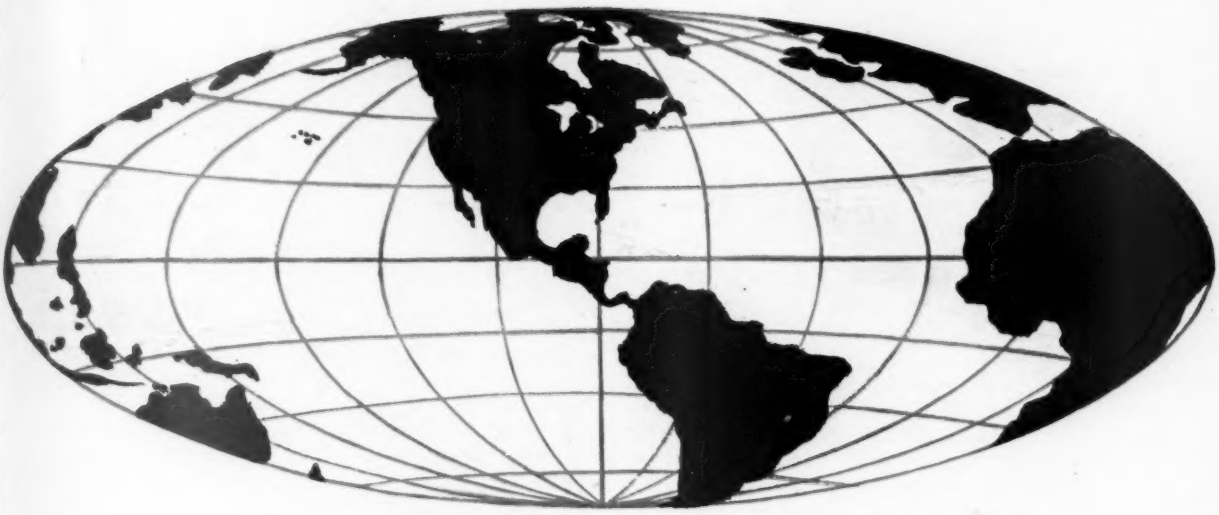
by President Dwight D. Eisenhower

Made before a delegation from the National Council of the Churches of Christ in the United States of America at Washington, D. C., on Sept. 9.

My attitude toward one of the functions of the church in promoting peace is one of appreciation of the great service it can perform in uniting better the free nations of the world. I think we should never forget we are supporting principles which are after all religious in their derivation. And I mean politically speaking, as against a godless atheism; and because this is an atheistic ideology, denying all human rights, any kind of human dignity, we have an enemy operating under a dictatorship that has us always at a disadvantage.

We are a democracy. We achieve our decisions by debate, by a representative form of government. They have a great advantage, whether it be economic or military or any other kind of contest, of having in one mailed fist all authority.

Now this is, I should hasten to say, not in the long run a particular form of efficiency. I believe it was Woodrow Wilson who said, "The highest form of efficiency is the spontaneous cooperation of a free people." And when the chips are down, that is exactly correct. If we declare a purpose to pursue an objective that will be costly, in sacrifice, in material sacrifice, maybe in suffering or in life, we will go on to the end. But when in a dictatorship that sacrifice and suffering holds more fear for the individual than his fear of the "boss," then chaos ensues. This happened in the last days of the czars, and it happened in the last days of Hitler, and in other dictatorships, including Napoleon.



Now, to go back to my main thesis that, by reminding ourselves always in every free country, every type of free government is a political expression of some form of religious belief, we have a great force of unity and we achieve among ourselves, by spontaneous cooperation, the kind of power that the other fellow cannot, in the long run, command.

The Founding Fathers, when they wanted to explain to the world that this new form of government was united in America, and noted that they had a decent respect for the opinion of mankind, said that "We hold that all men are endowed by their Creator"—in other words, to explain our form of government you had to call upon the Divine Creator.

This, it seems to me, is the strongest link that we have among all the countries of the West. Indeed I think this even includes the Mohammedans, the Buddhists, and the rest; because they, too, strongly believe that they achieve a right to human dignity because of their relationship to the Supreme Being. We must remember always that there are others that can have this same feeling of unity, because of their recognition of a religious destiny. So, what you are doing, what you are attempting to do, is, to my mind, one of the finest things that you could possibly undertake.

Now I was going to talk for 10 seconds, and I have already for 10 minutes, but I will say one other thing: I have been giving my mind and heart to this business of foreign relations for a long time, long before I was President. And one thing is always clear—Jefferson spoke about it, and many of our former statesmen: the need for an informed public opinion. Because, since public opinion is the force that makes our country operate, makes it function, we must be perfectly sure that that public opinion is applied in the right direction, or we are not going on the right road.

I cannot tell you how much I have concerned myself about trying to take simple issues in the foreign-relations field or indeed in the economic, and as I would like to suggest to you, the need for a sound dollar. I take these subjects, when I can, right squarely into press conferences, on the television. I am going to talk about foreign relations tomorrow evening a little bit—15 minutes. But always I feel the necessity of trying to make the facts available to the American public. And sometimes, you know, you have to tackle them and hold them down to feed these facts to them. The man that plows a furrow in Dickinson County, or works on a Brooklyn dock, or drives a taxicab—when you begin to talk to him about the need for helping the people of Ghana, or of French Africa—well, he wonders what in the world you are talking about.

Now you give the facts, but it doesn't always penetrate, so there has to be education—sometimes almost spoon-fed and probably with the aid of a hammer. But we need it. We talk all the time in Government and the public print about the woeful ignorance of foreigners about America. One thing we must be very careful about: How fully does the average American citizen understand his country, its problems, and its role in the world?

So, [there are] these two things—uniting the Free World through this common respect for religion; and educating ourselves as to the type of problem that we must solve—if we are going to be true to those values that our religion teaches us. These are two great works to which I should think all of us could dedicate ourselves full time.

Now just one more observation before I go out. I had a long talk with Cardinal Spellman on the phone. He is an old, old friend of mine—a good one. And I assure you that our Catholic brothers are joining you in these hours of prayer for peace—with the hope that those of Government that have to direct affairs in relationship with Russia and with others, can have some guidance that will come about because of this universality of prayer. He assured me in very emphatic manner on that, and I thought you might like to know it.

Reprinted from The Department of State Bulletin *Sept. 28, 1959*

SECURITY IS GOING TO THE DOGS

by TSgt. John K. O'Doherty
Airman Staff

IN the pitch black of a mountain night an air policeman moves slowly along the perimeter of a new, important missile site. At his left side, and linked to his hand by a slack leather leash, a 90-pound German Shepherd dog soundlessly keeps pace.

Suddenly the dog freezes in its tracks. Then the man catches the sharp, small sound of a falling pebble a hundred yards off on the hillside. The dog strains forward, pulling on the leash, hackles raised and tail extended, as a low uneasy whimper sounds in his throat.

Fifty yards away, a black shadow quickly detaches itself from the curtain of shrubbery, and the dog's voice rises in snarling ferocity as the figure of a man scrambles away up the hillside. "Halt!" The guard's voice is sharp as a shot. The dog, forelegs pawing the empty air, struggles frenziedly against the restraint of the leash.

At the second command, the scrambling shadow disappears in a tangle of rocks. Satisfied that this is no casual intruder, the guard releases the leash and speaks only two words to his raging partner: "Get him!" Like an avenging fury the snarling silver-grey streak bounds off into the night.

Air Force installations in nearly a dozen countries are now enjoying a greater measure of security against sabotage or any form of unauthorized intrusion through the expanding use of sentry dogs especially trained to work in partnership with air police. The four-footed guards are making a significant contribution to the effectiveness of security forces.

The earliest use of dogs by military forces is buried under the avalanche of history, but their role can be traced to the Greek and Roman civilizations. Both nations used large mastiffs for guard duty and attack. The record shows, too, that dogs were once trained to disrupt formations of cavalry by charging among the horses' legs with long, sharp knives attached to their collars.

The K-9 Corps

During the first World War, dogs were employed extensively by several of the nations of Europe, but it was not until after Pearl Harbor that the United States became seriously interested in their usefulness.

Under the War Dogs Program—popularly known as the K-9 Corps—some 20,000 dogs were procured by

the Quartermaster, beginning in 1942, but only a little over 50 percent completed training and less than 2,000 were actually sent to duty in overseas theaters of operation. Dogs were trained for duty in several areas of endeavor—including mine detection and messenger service—but proved more successful in scouting, patrol, and sentry duty.

Some of the dogs of World War II became quite famous for their accomplishments. Chips, half Collie and half Husky, was volunteered by his master for the K-9 Corps after he bit the garbage man. He served in Algeria, Morocco, and Tunisia, then moved along with his unit, the 3rd Infantry Division, to Sicily, Italy, and into France.

Although trained for sentry duty, Chips attacked an Italian machinegun position forcing immediate surrender of the crew. He is credited with direct responsibility for the capture of numerous other prisoners, and on one occasion was wounded by a pistol shot. He was awarded the Silver Star and Purple Heart, both later revoked as contrary to official policy. But Chips became the subject of two speeches on the floor of Congress. His assignments included sentry duty at the Roosevelt-Churchill conference at Casablanca in January 1943, at which time Chips is said to have bitten General Eisenhower on the hand.

The Air Force, with its unique problems in installation security and manpower, first employed sentry dogs in Europe and the Far East during the Korean era.

In 1955 the Strategic Air Command obtained dogs for use at ZI bases. Later in the same year the sentry dog program was adopted Air Force wide, and in October of 1958 the USAF Sentry Dog Training Center was activated at Lackland AFB, Tex. The center, which now trains dogs for both the Air Force and the Army, turned out more than 300 matched man-dog security teams during its first year of operation.

Recruiting

The German Shepherd has been selected as the breed best suited to the requirements of the Air Force, and no other type of dog is procured for the program. Prospective canine recruits are obtained from private owners or professional breeders all over the United States. Dogs are shipped by their owners to the Sentry Dog Training Center on a probationary basis at Air Force expense, and must conform closely to the standards approved by the American Kennel Club for German Shepherds. Males or spayed females from one to three years old are eligible.

Following arrival at Lackland each dog is subjected to a thorough physical examination. His temperament and intelligence are evaluated with respect to what will be expected of him during training and afterward. Sensitivity, aggressiveness, energy, and willingness are some of the factors considered by the examiner.

If the dog passes all his tests successfully, he is "enlisted." A serial number is assigned and a service record opened. A check goes forward to the owner for the price previously agreed upon and the animal becomes Air Force property. Prices may run as high as $150.

Contrary to WW II policies, dogs are never accepted on a loan or temporary basis and every Air Force sentry dog is in a career category.

The percentage of dogs rejected after arrival at the Sentry Dog Center is not inconsiderable, and in such event the dog is shipped back to his owner—again at Air Force expense. Commonest causes for rejection are gun-shyness, lack of aggressiveness, and certain physical defects, notably hip dysplasia, a congenital disease which frequently escapes detection by civilian veterinarians in the preliminary examinaton.

The dog and his new handler are trained together for six weeks at the center. Considerable care is exer-

"Sic Him." In training the dog to attack, the "agitator" wears a protective suit of heavily padded clothing. The handler never agitates his own dog, and permits no one to make friends with him.

cised in assigning men for sentry dog duty. All handlers are fully qualified air policemen, and only volunteers are selected for the training.

When the man and dog partnership is formed, the man assumes immediate responsibility for the dog's welfare. He must be sure that his dog is fed, watered, exercised, and groomed every day. The daily grooming includes inspection of the dog's nails, eyes, ears, nose, etc., and any evidence of ill health must be reported to the veterinarian immediately. The handler does not permit anyone other than himself to give orders to his dog, nor does he allow others to make friends with him. The dog's instinctive companionship for man is turned into comradeship with one handler; the two become an inseparable team, and the instinctive response of the dog to human attitudes is used as the basis for training.

Good Sense

The senses of the dog with which the military handler must concern himself chiefly are those of vision, hearing, smell, and touch. The dog's eyesight is inferior to that of humans and he prefers to approach closely to objects he wants to examine. Authorities are in general agreement that to a dog the world looks like a picture in black and white. On the other hand, if an object is moved ever so slightly most dogs will detect and respond to the movement.

In sense of smell the dog is so superior that it is difficult to imagine the vast range and delicate differences of odor to which he is sensitive. His nose tells him countless things about his surroundings that escape humans entirely. In hearing, too, the dog's ability surpasses that of man. It is known that dogs hear sounds in a pitch beyond the range of human ears, and in one test a German Shepherd at a distance of 75 feet responded to a sound which a man could not hear at a distance of 20 feet.

Basic Training

The training program at the Air Force center is a relatively simple process based on a practical knowledge of how the dog's mind works, constant repetition, recognition of the dog's progress, and—most important of all—patience. A dog does not understand abstract principles of right and wrong according to human standards. Reward and punishment are the means of teaching him. Dogs are usually anxious to please, and when they are rewarded for their performance by a word of praise or a pat on the head, they will sense that they have done the right thing and will do it more readily next time they are given the command. The dog is never permitted to ignore a command, and is never allowed to suspect that there is any alternative to obedience. He is never punished for clumsiness, slowness, or failure to understand what is expected of him.

Withholding of praise, or the word "No" spoken in a stern voice, usually constitute sufficient punishment for ordinary infractions. If a dog is callous or defiant, punishment must be more severe, usually in the form of a sharp jerk on the leash. But however trifling the offense, punishment must be inevitable and the punishment must fit the crime. Carelessness in correction is cruelty, since it will confuse the dog and render illogical the entire pattern of training. Under no circumstances is the dog struck with the hand or slapped with the leash. The hand is an instrument of praise and pleasure; he must never grow to fear it. The dog's name is

Early last spring the Stanga family of Mitchell, South Dakota, offered their German Shepherd dog, Wolf, to the Air Force for sentry duty. The three children were not too happy about giving up their special pet, but they accepted the fact that the dog would be happier in some place where he would have plenty of room to stretch his legs.

In due course, Wolf was turned over to the expressman in a crate, and a short time later the Stangas received a check for $150 from the Air Force.

Time passed and life proceeded smoothly in the Stanga household. But the children kept asking questions about Wolf, questions for which the parents had no answers.

Finally after three months Mrs. Stanga remembered that the Air Force check had come from Mobile Air Materiel Area, Brookley AFB, Ala. She sat down to write a letter. Mrs. Stanga told her story simply, pointing out that the children were asking questions. "I know the Air Force has much more important things on their minds," she concluded, "but it would be greatly appreciated if we could have some news about Wolf."

It was quite a surprise when a messenger arrived with a telegram from Alabama.

MRS. TED STANGA
916 N. GAMBLE STREET
MITCHELL, SOUTH DAKOTA

WILL ATTEMPT TO LOCATE AIR FORCE SENTRY DOG WOLF AND ADVISE YOU.

DAN F. CALLAHAN
MAJOR GENERAL, USAF
COMMANDER

The purchase of Wolf was only one of 60,559 contracts negotiated by MOAMA during the year, but Wolf was traced to the Air Force Sentry Dog Training Center at Lackland AFB, Tex., and from there to his duty station at McChord AFB, Wash.

The Stanga children now know that Air Force Sentry Dog Wolf, Serial Number: 3f51, is an outstanding member of the sentry dog flight at McChord. He is now a one-man dog, obedient only to A/3C Verlin Bush of Napa, Calif. And life in the Air Force is not too tough. Excellent quarters, three pounds of good food daily, and a monthly chat with the veterinarian. "Man, this is a dog's life."

never used in connection with punishment or reprimand.

Early training in such basic essentials as "Heel," "Sit," "Stay," and "Forward March" can be dull and depressing for both dog and man. From early in the program each training period is followed by a short break during which dog and handler may romp and play together. If the dog has not performed sufficiently well to deserve this reward, he is permitted to repeat some elementary exercise at the end of the period which he knows well so that he will always associate these pleasant interludes with good work.

More advanced stages of training teach the dog to be distrustful and suspicious of strangers. Training in "agitation" consists in teasing the dog to the extent of making him bite at the agitator. A thickly padded attack sleeve on the protective clothing worn by the agitator gives the dog something to get his teeth in, and a piece of burlap waved in his face like a toreador's cape provides enough irritation to anger him. In this type of training the agitator builds up the dog's confidence by backing away and acting frightened as the dog attacks. The dog is always the winner, and the handler, naturally, never agitates his own dog.

In attack training the dog is permitted to pursue and attack a running agitator who may be equipped with firecrackers or a .45 calibre pistol and blank ammunition. A gun is not a deterrent and a good dog can bring down a man in seconds. Then, upon command, the dog will leave his quarry and take up a position 10 feet away to watch him. The handler must instill the idea that every human, except himself, is a natural enemy.

For physical conditioning, dogs work regularly on the confidence course, which includes a water jump, hurdles, cat walk, and a long low tunnel through which the animals crawl with bellies to the ground. A good dog can scale a four-foot fence with ease once he has conquered his fear. As the handler helps him to overcome natural apprehension, the confidence course becomes an exhilarating game.

The main secret of developing a sentry dog is the degree of good relations between the handler and his dog. When the dog obeys because he wants to make the handler happy, the most important step has been completed. Mutual affection between man and dog is essential. The dog through his affection develops an active desire to protect his master.

Upon completion of the six-week training program, the air policeman and his dog proceed to their duty station. The dog travels in a lightweight, roomy crate specially designed by the Sentry Dog Center for the purpose.

At the duty station the training continues as a routine part of daily life. Dog handlers as a rule devote about two hours every day to grooming, exercise, and training. If a dog and his handler are separated permanently—due perhaps to the discharge of the airman —a new master is not assigned to the dog immediately. He is relieved from duty temporarily, and someone whose face and figure are familiar supplies food and water during the period of emotional adjustment. But the habit of usefulness is deeply ingrained, and after an interlude of idleness the dog will be ready and eager to accept a new handler.

Item of Equipment

Sentry dogs are intended for use primarily at night when the faculties of scent and hearing may prove most useful. The four-footed sentinels do their best work in large open areas. Tactical aircraft parking ramps, POL storage compounds, pipelines and pumping stations, missile launching sites, and isolated transmitter-receiver stations are some of the typical areas in which dogs are employed.

Officially the dog is an item of special equipment provided to assist the air policeman in maintaining more effective surveillance over his post. As a detection and warning device the dog's primary function is to alert the handler to the presence of an intruder, and it is then the handler's responsibility to determine how to cope with the situation. If the handler decides that the dog is to be released to pursue and apprehend an intruder, the animal is then regarded as a deadly weapon.

Apart from his very real capabilities as a detection instrument and as a dangerous weapon, the sentry dog has a tremendous psychological affect. His very presence in the security system is enough to deter any but the most determined intruder. The casual sneak thief is likely to seek an easier target elsewhere. This is the reason for large signs always posted in a prominent position: "Warning. This Area Patrolled By Sentry Dogs." The intruder who has the misfortune to meet an Air Force dog face-to-face at close quarters is not deserving of any particular sympathy, but he can't say he hasn't been warned.

Partners! Handlers spend about two hours daily in care and training of dogs.

From secret documents to crypto machines, Air Force couriers deliver the goods.

BY COURIER

ONE day last August an armed Air Force officer picked up a pouch full of *top secret* papers from the White House. Next morning he delivered it to President Eisenhower during the Chief Executive's whirlwind European trip.

The "protected handling" delivery was made by the Armed Forces Courier Service, a unique organization that provides secure and expeditious messenger service for classified material to any place in the Free World.

In the National interest, highly classified security information must be transmitted throughout the world with speed, reliability, and absolute security. The Armed Forces Courier Service, a joint agency of the Army, Navy, and Air Force, does this economically and efficiently by eliminating the need for many independent couriers who would otherwise run all over the world, criss-crossing and duplicating each other's efforts.

"We run couriers on regular schedules between major international points," explains Lt. Col. James K. Adcock, Air Force Postal and Security Courier Operations Chief, "then on 'feeder' routes to the hinterlands to rendezvous with local couriers. Our grave responsibility requires that we maintain absolute control of our farflung operations at all times and operate with almost split-second timing to keep our rendezvous on a guaranteed basis."

The Air Force operates 32 of the 59 Armed Forces Courier Transfer Stations in 18 countries — from Greenland to Puerto Rico; and Saudi Arabia to the Philippines. Deliveries in countries not covered by courier service are handled through a mutual agreement with the State Department. ArFCoS carries State and Defense Department material to designated areas, then turns it over to Diplomatic Couriers for final delivery.

An unbroken chain of receipts for the classified material insures step-by-step security from point of origin to destination. The security courier witnesses all pouching and unpouching. The pouches are equipped with special locks with rotary numbered cylinders that indicate each time they are opened.

Today, 86 Air Force officers have full time courier duties. Many others, at small isolated locations, perform courier service as an additional duty. Like firemen, they must be on-the-ready at all times to "slide down the pole" and be on their way by plane, train, car, or boat.

Dispatches to and from overseas stations and within overseas areas are made by utilizing commissioned officer passengers—on TDY or PCS moves — as designated couriers. Within the ZI, however, assigned couriers are used almost exclusively to transmit highly classified material.

For the Air Force officers who help ArFCoS perform its important mission by serving as designated couriers, it's a tough job. Maybe the officer flying from Goose AB to Thule AB in a C-124 doesn't like sitting near the door of the *Globemaster* throughout the trip, one hand near his .45, the other on an oversize metal box containing secret crypto equipment. But he realizes the importance of courier service to our National security. And he delivers the goods with "No sweat!"

—DAVE KARTEN

Journey begins at McGuire AFB, N. J. Courier transfer officer signs for material after top secret *control officer checks it.*

Every item handled by the courier service is given a control number. Items are then consolidated in locked canvas pouches.

After a thorough verbal and written briefing, the designated courier officer signs for the locked documents.

Under strict supervision of the courier and an armed guard, classified shipment is carefully stowed in cargo compartment. Highly classified material is moved from point to point around the world with top priority.

Designated courier is the last man to board the aircraft after the top secret *material has been stowed in the cargo compartment and secured.*

Upon arrival at Mildenhall Courier Transfer Station, the classified material is double checked to insure nothing in pouches has been removed or tampered with.

Journey's end. Security officer signs for the classified material.

A CHRISTMAS KNIGHT

THE TIME: Christmas 1942. THE PLACE: Little Bardfield Hall, Essex, England. THE OCCASION: Chapter one in the 17-year history of "Operation Christmas Knights."

Sergeant Allyn Rogers of Boston, Mass., was playing Father Christmas to 80 war orphans housed in Little Bardfield Hall, 50 miles from London.

Six months earlier he'd come to Little Bardfield as a weekend guest of local residents. Some English war orphans saw him in church. In their enthusiasm they swarmed over him in the middle of the service. Rogers was surprised. A matron later told him he was the first American soldier these orphans of the London blitz had ever seen. To them he represented American kindness. The matron invited him to the children's home, Little Bardfield Hall.

He came many times after that, to sit before the fire in the great hall of the 16th Century Tudor manor house, and tell stories to the children. That December the matron of the hall, Miss Kitty Edwards, asked Sergeant Rogers to play Father Christmas. He readily agreed—but with a sinking heart. Toys were not to be had in wartime England—not even with money. What good was Father Christmas with an empty pack?

Fortunately he had belonged to a British War Relief agency in Boston. They helped out with 80 toys, sent across the Atlantic. Then London's *News Chronicle* carried a story headed: "American Sergeant Has Eighty Stockings to Fill." The poignant tale touched the hearts of the British public.

In appreciation, the British Government gave the young American sergeant one of its highest awards—The Order of the British Empire.

"Operation Uncle Walter"

The time: December 1954. The place: Duluth, Minn. The occasion: Chapter two in the 17-year history of "Operation Christmas Knights."

Late one night, a few weeks before Christmas, the telephone rang in the Dean's residence of Duluth's Trinity Episcopal Church. Dean Walter Allyn Rogers, O.B.E., sleepily answered, expecting an emergency sick call. The faraway voice on the other end said, "This is the chaplain of the 20th Fighter Bomber Wing, USAF at Wethersfield, Essex, England. Can you come to our base for the climax of 'Operation Uncle Walter' named after you?"

The men of the wing had contributed $3,000, the chaplain said, to furnish toys, gifts, and clothing for 750 orphans in 24 Essex orphan homes. "We want you to play Father Christmas again," the chaplain said. To his own amazement, Dean Rogers heard himself say he would be there.

For the dean of a cathedral to get away at Christmas time was easier said than done—but Rogers did it. He obtained permission from two bishops and the USAF Chief of Chaplains, and days later was at RAF Station Wethersfield.

The 20th Fighter Bomber Wing collection had been spent on 1,500 gifts, chosen according to each child's wish expressed in letters to Father Christmas. The gifts had been individually wrapped by wing wives; men of the wing had filled stockings; and each child's name appeared on a package. In addition, every orphan was to receive a cap with matching scarf and mittens.

Each of the 24 homes had a special Christmas party that year, and "Uncle Walter" Rogers acted as Father Christmas at each. The officers and men of the wing went along to help distribute the gifts. Most of the children had never had any possessions before; their joy brought tears to the eyes of many.

Five Years Later

The time: Autumn 1959. The place: RAF Station Wethersfield, home of the 20th Tactical Fighter Wing. The occasion: Chapter seven in the 17-year history of "Operation Christmas Knights."

Five years have gone by since Dean Rogers returned to Essex. Each year the men of the 20th have begun early in the fall, contributing money to carry on a now-annual tradition. Only the project name has changed. It officially became "Operation Christmas Knights" in 1955.

For the sixth year the men of the 20th TFW are giving their all-out support to "Operation Christmas Knights." This year over 600 Essex orphans will receive gifts from Father Christmas; and another happy chapter will be added to one of the Air Force's great Anglo-American traditions.

by 1st Lt. JAMES HOUSTON
20th Tactical Fighter Wing

RUBBER CHECKS AND ELASTIC BALANCES

by MSgt. Paul J. Turner, *Airman Staff*

It's Saturday evening. A young airman sits restlessly in his living room while his wife washes the dishes. They've been home every evening for the past week and the airman feels it's time for a night out —maybe a movie or a few hours at the club. But that takes money and he has less than a dollar in his pocket. His checkbook shows a balance of $1.80. Oh well, he can cash a $10 check at the club—it won't reach the bank until Monday. And by then he will have deposited his paycheck, due in Monday morning.

The night out was pleasant, but Monday the mail delivery was late. The bank closed before the airman could get there. Result: Wednesday morning his squadron commander called him into his office. His check had "bounced." Obviously, the airman hadn't intended fraud, but he had used his signature in an act of financial irresponsibility. A mark, reflecting on his honor and integrity, was made on his record.

Unfortunately, the airman's experience is an all too common one today. Many in the Air Force live from "hand to mouth," floating checks over a weekend with the intent of getting the paycheck into the bank in time. Wives' allotment checks are similarly relied on to cover such withdrawals.

But too often, something goes haywire on payday — a shortage, redlined because of some discrepancy—numerous uncounted on delays which frequently pop up. Then, another case of insufficient funds with resulting adverse effects on an officer's or airman's career.

The actual use of checks originated many centuries ago. Those who had to travel through bandit infested countries would turn their money over to a merchant in exchange for a "draft" on a firm at the traveler's destination. This practice was the same as buying a cashier's check or money order today. It became too awkward to use in the markets of daily trade, and "banks" were formed by the merchants. As today, the banker told his depositor he would honor any check he wrote if it did not exceed the amount on deposit with the banker.

Checking accounts in this country are used by millions. Airmen find them convenient for paying bills, securing receipts, and safely storing money. However, every day throughout the United States thousands of worthless checks are passed. Unfortunately, some of these are signed by officers and enlisted men of the USAF.

Insufficient Funds – Insufficient Men

Last year General Thomas D. White dispatched a communication to major air commanders advising of the serious nature of the worthless check problem in the Air Force. In effect he reiterated the USAF's position of not condoning bad check practices by any Air Force personnel, indicated his dissatisfaction with the number of checks being returned, and stated that although a bad check can be the result of negligence this makes suspect the leadership, character, integrity, and further usefulness to the Air Force of the offending individuals. Since then, a black mark for issuing a worthless check has become a part of the Quality Control Program. Commanders at all levels are giving the bad-check problem their personal attention. Official correspondence regarding an individual's personal financial management is placed in his Unit Personnel Records in accordance with Chapter 5, AFM 35-9. Entries are also required on performance reports in many commands and in some cases commanders require regular and detailed reports on each infraction of the check-writing privilege. These acts have caused considerable improvement.

Writing bad checks is not only a reflection on the man and the uniform he wears, it is *larceny*. In some states it is defined as "Larceny by Check." The Uniformed Code of Military Justice, Article 121, includes larceny by check together with other forms of the offense. Maximum penalty for a violation under the military code is dishonorable discharge, total forfeiture, and confinement at hard labor for five years. In addition, if the check is passed in civil channels, USAF personnel can be tried in civil courts where punishment varies according to State law.

Who Me?

Worthless checks can be deliberate or the result of negligence. Anyone can accidently write a bad check, but no matter how good the man was before he wrote one, he'll never look quite as good as he did before he thoughtlessly misused his own name.

There are certain pitfalls to watch for if you use a checking account and want to avoid the black mark of a worthless check. First and foremost is the "check and balance" policy. Many bad checks result from poor addition and subtraction on check stubs. This arithmetic should be double-checked often and periodically when a bank statement arrives, to be sure balances jive. If they don't, go see your banker.

Next are those who use two check books for one account, be it jointly or individually listed. The husband

doesn't know what checks the wife has written nor she the total of his withdrawals. For any checking account, *only* one check book should be used and all checks should be accurately recorded in the stubs provided for that purpose. NEVER write any check unless you have your check book with you and can make an entry on the stub at the time the check is written.

The ID card, your service number, and uniform traditionally identify an airman as a good credit risk. Consequently, upon presentation of your ID card, most merchants will cash your personal check without question. They know the Air Force does not tolerate poor financial management by its people; they also know that while you're in the service and they have your service number, you can be located if the check "bounces." This is why each time a worthless check is passed by any member of the Air Force it brings discredit to the USAF as well as the individual, his unit, and his base.

Check List

If you now have or expect to open a checking account, here are some suggested ways to keep from accidently writing a bad check:

1. Never write a check unless you have your check book with you.
2. Make a weekly review of your check stubs, checking all arithmetic.
3. Reconcile your bank statement balance with your check stub balance.
4. For individual or joint accounts use only one check book.
5. Always write the amount of your check on the check stub at the time you write the check.
6. NEVER write a check on money not actually in the bank but which you hope to deposit, in time.
7. If all else fails, discontinue your checking account.

THE CARE AND FEEDING OF FLIGHT INSTRUCTORS

In learning to fly, the beginner is faced with two major problems. First is the airplane, which is a piece of machinery that can be mastered with perseverance, practice, cool headedness, curses, and occasional swift kicks. Second is the flight instructor and a problem not so easily surmounted.

The instructor is a special breed of pilot. He is easily recognizable by his great courage, extreme skill, low forehead, and mean little eyes. Because the instructor already knows how to fly, he has the student completely at a disadvantage. He is unimpressed with whatever skills the student might have outside of aviation. He is dedicated, therefore, to showing the student how little he knows and, by his own example, how completely unsuitable the student is as pilot material.

Those who wish to make a success of flying are advised to follow a few common sense rules in dealing with instructors.

1. *Let Him Know Who Is Boss.* This is done by keeping your mouth shut, as he already knows he is.

2. *Earn His Respect and Admiration.* Best done by saying your father is president of a large airline looking for pilots at a fantastic salary. All instructors are dissatisfied with their present jobs.

3. *Reward His Efforts.* It is well to bribe him with bills of large denomination. In return he may show you a little about flying an airplane.

4. *Let Him Know Your Problems.* Say you are constantly pursued by beautiful women to whom you would introduce him. Instructors are girl-crazy and you will get extra flight time while he thinks this over. It also serves to keep his mind off your mistakes.

5. *Show Admiration for Him.* Let him know how impressed you are that he can fly even though he had no sleep and is suffering from acute hangover. Instructors are egotistical and will mistake this for a compliment.

6. *Tell Him Your Ambitions.* Appear for lessons with hair uncombed, shoes scuffed, and buttons missing from your shirt. Wear a leather jacket with holes at the elbows and look bored with the whole procedure. He will know you are interested in becoming an instructor and give you special attention.

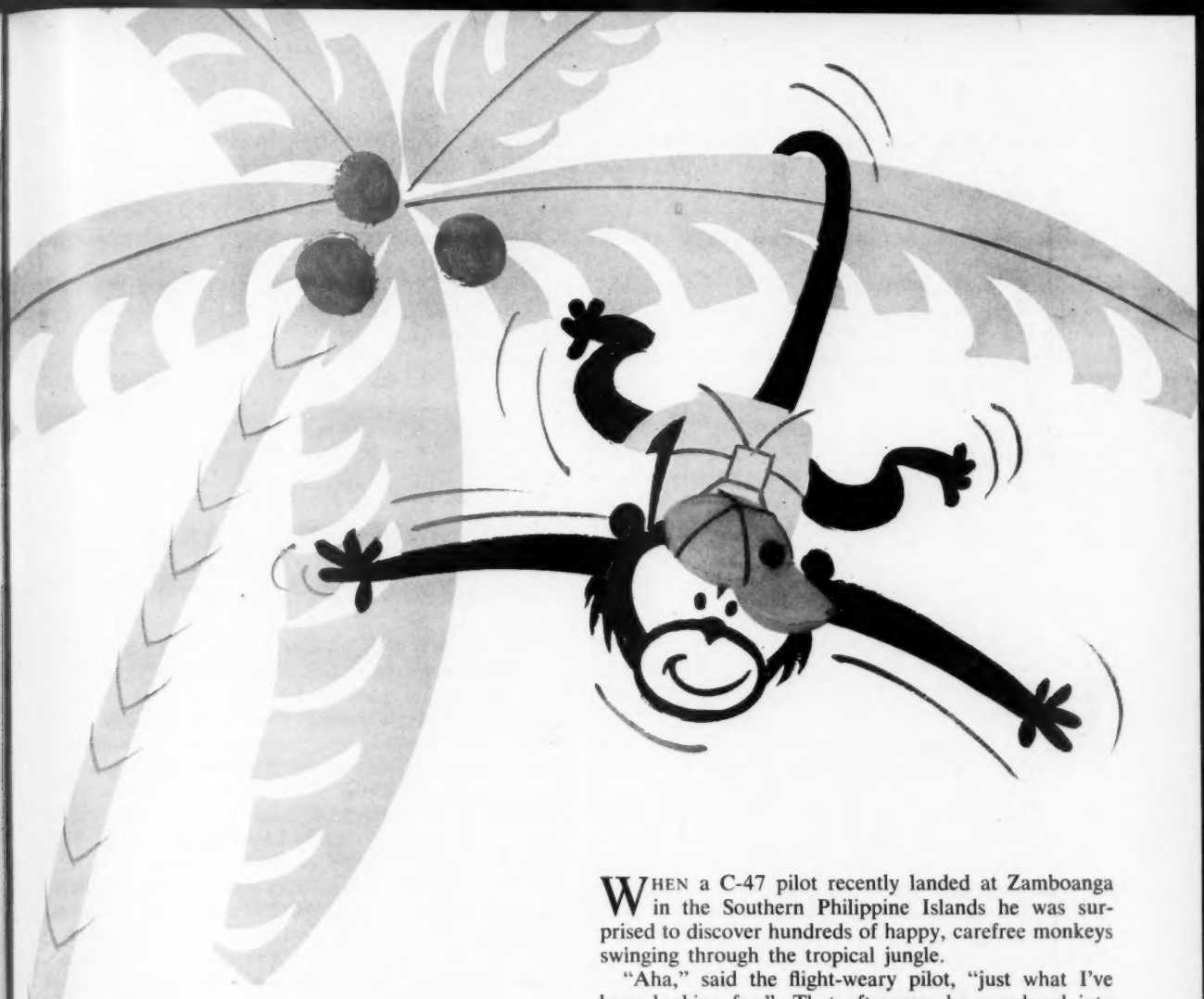
7. *Demonstrate Your Aptitude.* Fly with one wing low and skid all turns. Get plenty of good bounces into landings and ground-loop once in awhile. Instructors prefer to think all students are knuckleheads.

8. *Show the Right Mental Attitude.* Convince him you are a lunatic. Instructors solo students when convinced there is nothing to be done, and they are bent on committing suicide anyway. Louse up enough landings and he will leave the airplane to save his own skin. You can then teach yourself.

9. *Never Disobey Instructions.* When the instructor tells you to go to —, file a flight plan and take off.

10. *Don't Take Unnecessary Risks.* Fly solo whenever you can.

From *AM*, Anderson Air Activities, Malden AFB, Mo.



MONKEYS, MULES, AND MYNAHS

by 1st Lt. Brian T. Sheehan
Airman Staff

WHEN a C-47 pilot recently landed at Zamboanga in the Southern Philippine Islands he was surprised to discover hundreds of happy, carefree monkeys swinging through the tropical jungle.

"Aha," said the flight-weary pilot, "just what I've been looking for." That afternoon he wandered into the thick jungle, climbed a tall tree, and captured one of the small animals.

Later he carried the monkey to the personal equipment quonset, outfitted it with a parachute and flight suit, and handed the monkey a C-47 checklist.

Next morning the pilot took off for his home field. Sitting in the copilot's seat was the monkey. The pilot became sleepy. "Hey, Sam," he said to the monkey, "will you fly her for a while?" The monkey said, "sure."

The monkey took the controls, flew a perfect course, made an instrument landing at the base, and turned in the flight plan. The next day the pilot was grounded, but the monkey was made a base C-47 instructor pilot.

This tale is a rich example of what Air Force mascots worldwide are said to have done. The zany antics of these pets (and sometimes their keepers) aren't always true, but are interesting, as revealed this month when THE AIRMAN made an unofficial nose count of USAF mascots.

Wherever you find the Air Force, discovered THE AIRMAN, you will find a mascot or two. Animals, it seems, are friendly things, and they find the Air Force

a more congenial place than some civilian's unkept back porch.

From its animal survey THE AIRMAN further learned that mascots—whether polar bears or kangaroos—are not to be taken lightly. It is true, of course, they sometimes look funny, come in a variety of sizes, shapes, and colors, and have had interesting experiences, like logging 3,000 jet hours and flying combat.

But each mascot has a "role," so to speak, and is in some way usually helping the Air Force with its global mission.

A pet donkey named "Lady Moe II" at Dyess AFB, Tex., for example, is helping improve that base's flying program. Occasionally "Lady Moe II's" name is included on a pilot's passenger manifest. (Lady Moe I died during WWII when she lost a right-of-way dispute with an English train.) If Dyess flying personnel don't notice the donkey's name on their loading list, they are respectfully asked to read it more carefully next time.

Overseas at Samsun, Turkey, airmen and officers are keeping physically fit by wrestling with their mascot—a 311-pound Russian bear which they bought for 400 lira ($44) from a traveling salesman. The bear, nicknamed "Captain Elliot," is four years old, eats wheaties for breakfast, and can whip three strong airmen in wrestling competition. Even so, Samsun personnel wrestle the bear weekly for their physical exercise.

In another part of Turkey, at Karamursel Air Station, a three-year-old mule named "Ashek" (Turkish for mule) keeps morale soaring. She's the only lady (sic) assigned to the small post. She arrived at the base in 1958 as a live stand-in for a Christmas display. Since then she has been promoted to airman first class. When motor pool vehicles are busy she subs as a utility truck. Her shrill voice also qualifies her as a security guard. "We couldn't run our base without her," grinned one officer at the site.

He Gets Their Goat

NCOs who don't like something to get their goat should never attend the NCO Academy at Westover AFB, Mass. Why? Because a goat named "Raunchy" can be a nemesis for them. Their first day in the program they are told to keep their flight demerit levels low, or else. At the end of the first week's study the flight with the most demerits has "Raunchy" assigned to it. The bearded goat accompanies the flight to all military formations for a full week.

But before "Raunchy" the goat arrived at Westover, another pet was the talk of the SAC base. It was a baby polar named "Snowball." "Snowball" thought the weather at Westover was beastly, and became ferocious, so he was offered to Springfield, Mass., zoo officials who had been on the prowl for a bear. They accepted "Snowball" as a gift. Community relations between the air base and civilian community reached a new high because of the event.

A sergeant who lives in a trailer park near Eglin AFB, Fla., adopted a mascot recently when he found a small deer munching on his well-kept flower bed.

The deer became a frequent visitor to the trailer, and one day the sergeant's wife invited it inside to watch TV. While viewing television the deer saw a "Bambi" cartoon. It was love at first sight. The deer bounded off to Hollywood to marry "Bambi," couldn't find her, and returned to Eglin a month later broken-hearted. Children living in the trailer park now spend their time soothing the mooning deer's spirits, and some Eglin mothers don't need baby sitters anymore.

Personnel at the 738th AC&W Sq. Olathe AFB, Kans., are aware of good dental hygiene habits thanks to their mascot—a female honeybear named "Coter," which belongs to A/2C Richard Reynolds.

The honeybear, a nine-pound pet from South America, recently became addicted to toothpaste. The bear got its first taste for toothpaste when Airman Reynolds decided to clean its molars. Everytime the bear smiles now station personnel are reminded to brush their teeth.

A fast-talking mynah bird named "Fireball," owned by civilian flight instructor Bob Weaver at Spence Air

"Pegbur," mascot of the 314th Reserve Troop Carrier Sq., McClellan AFB, Calif., receives life preserver from A/1C C. A. Thorpe and SSgt. W. F. Byrum before going on overwater mission.

"Asbek," a three-year-old mule, is an ammunition carrier and security guard at Karamursel Air Station in Turkey. Admiring their mascot are, left to right, Capt. Donald L. Clark, Capt. Leonard F. Anderson, and TSgt. W. G. Stockl.

Base, Ga., is the pride of "Fireball" flight at that contract flying school.

Student pilots in Weaver's flight once spent long hours teaching the bird to say, "Hello Fireball." Then, rival members of "Rebel" flight got ahold of the mynah. They secretly taught it to say, "I'm a Rebel!"

When visiting officers inspected "Fireball" flight's briefing room one day last month the mynah bird was perched in the corner. Flight instructor Weaver proudly told the visitors his bird was a boost to morale, could say, "Hello, Fireball."

An officer walked over to the bird and said "Hi!" "I'm a Rebel" screeched the mynah. Instructor Weaver and his students were shocked. Because of the incident a fierce rivalry between "Fireball" and "Rebel" flights has ensued, and academic and flying performance for both groups have passed all previous marks.

Dogs Are the Favorite

However, of all mascots—large and small—that haunt air bases, sleep in hangars, and lounge around briefing rooms none is more popular than man's trusty friend, the dog.

Indeed, there are probably 10 dogs for each other type mascot in the Air Force. This is so at Charleston AFB, S. C., where dogs outnumber all other mascots 15 to one. Seven dogs, for instance, make their home in one fighter squadron there.

Six months ago a dog strayed into the 444th FIS's operations building. She liked the surroundings, the pilots, and technical people. She stayed, had six pups and now the squadron has seven mongrels. A squadron dog house was built for the animals by two airmen, and identification tags, flightline passes with pictures, and serial numbers were issued the canines.

Though the seven dogs at the Charleston fighter unit are not rated, other mutts at different bases have hundreds of jet hours, flown combat, and even registered "kills."

Anyway, that's the claim of officials at Osan AB, Korea, who own an old hound named "Rocky." During the Korean conflict "Rocky" flew daily combat missions with fighter squadron pilots. He supposedly scared a MIG pilot out of an aircraft by barking at him during an air battle.

Another supersonic canine who has seen plenty of flying is a cocker spaniel named "Tinkle," owned by Lt. Col. John Kropenick, chief of fighter maintenance at the Air Proving Ground Center, Eglin AFB, Fla.

"Tinkle," according to Colonel Kropenick, has logged 3,000 jet hours and flew one combat mission up MIG Alley. The dog has since retired from active flying.

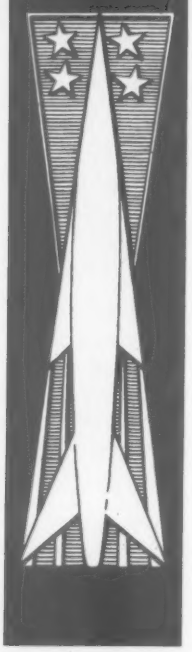
THE AIRMAN's unofficial survey revealed that hundreds of dogs, and other animals, make life pleasant everywhere for personnel. Some of these pets have peculiar abilities. In France there's a pooch named "Shoo Shoo" who drinks cognac (she's a French poodle). On Formosa a missile squadron owns a kangaroo which recently won the base boxing championship, and in Spain a SAC unit loves its Africa-imported giraffe. (They use it as a mobile control unit.)

The actual value of these mascots is somewhat nebulous. You can't say they all have certain jobs, because truthfully, some don't. Many are outright freeloaders.

But the point that there's some good in every pet was dramatically stated recently by a squadron commander at a remote site in Morocco. His unit's mascot is a one-hump camel.

"Remember one thing about our camel," he told his men. "If our trucks break down and our airplanes can't fly we've still got transportation."

A dog-gone tough boss is "Blitz," the German boxer and mascot for the 799th AC&W Sq., who has been known to "chew" people out if things didn't run right in the unit.



AIR FORCE T-MEN

They tell the missiles where to go and how to get there.

by Dave Karten, *Airman Staff*

LAST September an Air Force officer at Vandenberg AFB, Calif., pressed a button that launched an *Atlas*. It was the initial military firing of this Nation's first operational intercontinental ballistic missile.

The 75-foot stainless steel giant, exuding fire from its powerful engines, seemed to be pressed aloft by a huge ball of flame as it roared off the mesa sands into a clear sunny sky. With a top velocity of more than 15,000 m.p.h., the "bird" streaked 4,400 miles across the Pacific. It hit its target near Wake Island in less than half an hour.

Credit for the first launching of this country's new strategic deterrent weapon under the direction of an Air Force unit, said SAC Commander Gen. Thomas S. Power, belongs to the Government-military-industry team. Credit for the training shot's accuracy belongs to a select group of USAF specialists assigned to SAC Hq, Offutt AFB, Nebr.

The Air Force's T (for trajectory) Men came into being with the advent of the missile age. Shortly after emergence of the now-famous *Sputniks*, SAC began converting from an all-jet bomber command to a mixed force of the latest strategic missiles and bombers. It became apparent we would need highly skilled technicians to carefully calculate the trajectories of the "beasts" and to give them their "orders."

The Air Research and Development Command immediately began recruiting officers and enlisted airmen with technical and math backgrounds for special training.

At the Air Force Ballistic Missile Division Headquarters, Inglewood, Calif., and in special courses at Stanford University, the T-Men learned the highly specialized trajectory business. In a new branch of SAC Hq—the Missile Trajectory Center—in Omaha, they received on-the-job training.

Months before the September 9th *Atlas* shot they worked around-the-clock practicing "trajectory arithmetic" until they had it down pat. They learned how to feed geodetic and gravimetric information along with characteristics of the particular missile into high-speed electronic computers. The computers then produced the correct settings that went into the *Atlas* guidance system just prior to its launch.

Photo by MSgt. W. E. Lummus

The IBM 720 printer converts taped information about SAC's worldwide activities onto paper at the rate of 500 lines per minute. TSgt. Frank J. Kirsch operates printer while 1st Lt. Peter C. Charron checks the output.

Headed by Col. Jack Whitson, the SAC Trajectory Center employs the brains of some of the Air Force's most highly skilled mathematicians and computer technicians and programmers to accomplish the infinitely detailed task of giving missiles their "orders."

The "Trajectory Men" are part of the 544th Reconnaissance Technical Group, the unit that provides SAC's Director of Intelligence with air target charts for combat crews, intelligence data including electronic reports on enemy radars, and missile trajectory target kits. At Offutt a new three-story wing addition to the control center, scheduled for completion next month, will house the men and machines assigned to compute missile trajectories.

"Our responsibility," explains Colonel Whitson, "is computing guidance presettings for every strategic missile to be operated by SAC. This includes the *Atlas, Titan,* and *Minuteman* Intercontinental Ballistic Missiles (ICBM), *Thor* and *Jupiter* Intermediate Range Ballistic Missiles (IRBM), and *Snark* Intercontinental Cruise Missile (ICCM)."

All of SAC's aircraft and missiles have pre-assigned targets in the command's emergency war plan. The mission of globe-circling SAC, and its ability to get into action quicker than a frontier sheriff, are well known. Changeover to a mixed force of missiles and bombers has naturally posed a few problems. One of them is aiming the missile prior to launch.

SAC combat crews can guide their bombers to the target, controlling the flight every mile of the route. Missiles are different. They can't think for themselves. And unless a pre-programmed flight path instruction is fed into the weapon system, the incredibly refined and complex "bird" is nothing more than an expensive but totally useless piece of hardware.

You have to aim the missile correctly because it's impossible to divert a ballistic missile after a very short time in the air, and of course, once it's launched, it can't be recalled. That's why precision accuracy is emphasized in every operation at the Trajectory Center as T-men feed bits and pieces of data into the high speed computers. There is little margin for error.

Working closely with SAC's Directorate of Intelligence, Trajectory Men obtain their information on missile targets from the maze of intelligence data that flows into the Omaha headquarters daily.

T-Man TSgt. Don Russell, assigned to Trajectory Center, computes trajectory data with aid of Friden Computer and geodetic model.

"Target priorities," points out Col. R. N. Smith, SAC Director of Intelligence, "don't remain fixed. They change constantly as different target complexes become more strategic, that is, more important to the enemy's war-making capacity."

Thus, rapid programming of missile trajectories becomes a matter of vital concern to SAC's commanders and planners. Due to the compression of time brought on by modern weapon systems, there can be no allowance for slow computation. And one missile trajectory may require as many as 650 items of data to be processed.

"Without electronic computers," says Colonel Whitson, "a missile would be obsolete by the time one man could figure out the answer to the trajectory problem. If a complex electronic brain were carried aloft in the missile, it would cut down the warhead size almost to the point of uselessness."

Trajectory computation is complicated by a number of factors. First of all, although machines can be refined to the point of near-perfect accuracy, the lack of flexible human guidance still leaves a gap in their reliability. Then too, there is the fact that the earth isn't the perfect sphere we have long believed it to be.

The earth isn't smooth or uniform in makeup. It has bulges and bumps on its surface, all of which affect gravity. And since the earth is moving, the job of firing a missile at any specified point on the globe demands that the projectile be fired from a moving platform and hit a moving target.

It's like throwing an object from your car into the air and aiming it toward another auto travelling at the same speed and in the same direction several yards ahead.

It's no easy job but the Air Force T-Men are learning to do it with deadly accuracy. As more and more missiles become operational in the SAC inventory, their flight paths will have already been programmed by the T-Men—the "sharpshooters" of the missile era.

T-Men mount reels of fresh intelligence tape on the IBM computers. From information contained on these tapes, computers are capable of computing mathematical answers and missile trajectories in seconds.

Photo by MSgt. W. E. Lummus

Night Mission SAC *Woodi Ishmael*

Palettes and Planes

the Air Force on canvas

"There is a world up there at 40,000 feet the public never sees."

Those vivid shades of high-altitude purple made me feel I was no part of the earth. My flight to me epitomized the extraordinary life led by SAC airmen."

This was how artist Fred Ludeken, a member of the Society of Illustrators, orally described a SAC training mission which he later put on canvas.

His work, along with artist Woodi Ishmael's *Night Mission*, shown here, was donated to the Air Force. Their paintings joined hundreds of others showing the Air Force at work on the ground and in the air.

Five years ago the Air Force invited artists from the Society of Illustrators to travel and document Air Force history as a patriotic gesture. Subsequently, these artists travelled to the Far East, Europe, Alaska, and North Africa where they painted everything from SAC air-to-air refueling missions to an airman on leave in Paris. Some of these paintings are shown on these three pages.

Since 1954 more than 160 major paintings representing the work of 50 artists have been presented to the Air Force. A number of these history-revealing paintings are now on display at the Pentagon in Washington, while different collections are scheduled for exhibits at air bases and leading art centers around the U. S. Many adorn the modern walls of the U. S. Air Force Academy, and some have been adapted and used for recruiting posters.

("One crowded hour of glorious life is worth an age without a name." Sir Walter Scott)
Fighters at Hamilton AFB, Calif. — *Woodi Ishmael*

Palettes and Planes

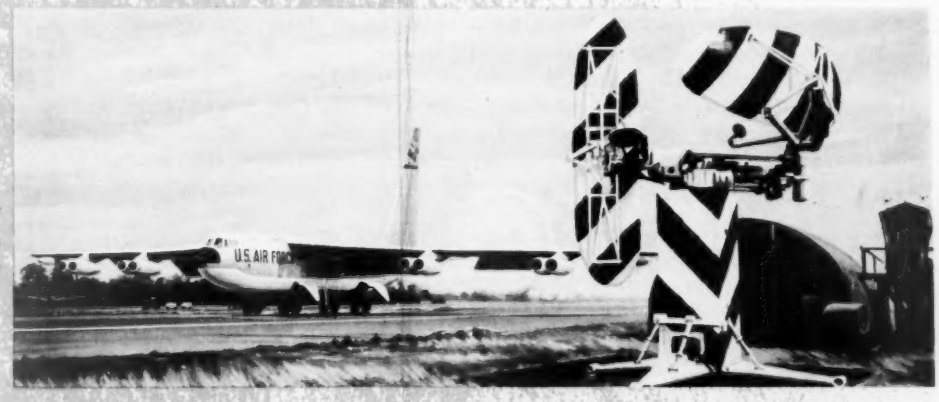
Kinderlift Luggage, 1957
Max Johnson

Arabs and a C-119 at Wheelus AB, Tripoli
Robert Handville

Prior to Take-off

Setting Up Base, Taoyuan, Formosa — *Earl Gross*

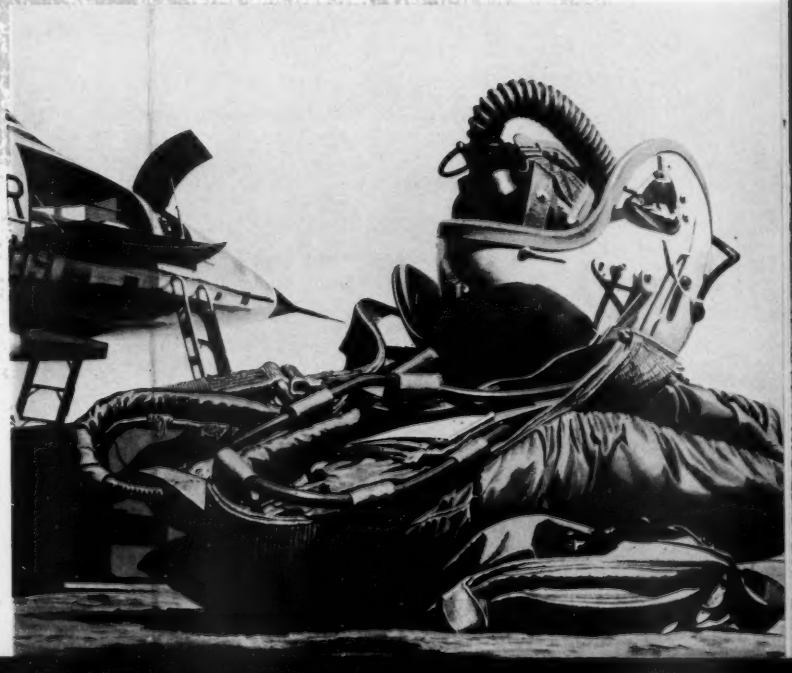
The Northern Lights from Frobisher Bay
Carl Broemel



B-52 Landing,
Eglin AFB, Fla.
Woodi Ishmael

B-47s Over Old Tucson
Hardie Gramatky

Lt. Col. George Bales



Fighter Pilot's
Equipment

Robert Lopshire

TEST FORCE

Crew reviews B-58 characteristics prior to test flight.
New test force procedures put HUSTLER *into operational use months ahead of schedule.*

The long-legged, long-ranged, versatile B-58 that hustles about its business almost automatically at speeds more than twice the speed of sound was the first bomber to be manufactured under the weapon system concept.

This concept is the centralized control of design and production of the weapon and its support system by a single prime contractor supervising the work of many subcontractors. The whole program is monitored by Air Research and Development Command's Directorate of Systems Management although Air Materiel Command's Aeronautical Systems Center has executive management responsibility. When the weapon itself becomes operational, the entire support system—including the men who will maintain, fuel, and crew the weapon—is operational, and the weapon system is ready to strike.

The last stage in development of a new combat aircraft is flight testing, until now a time-consuming, expensive process. Under the old system when time was not a factor, it was accomplished in eight phases: first, by the manufacturer, then by ARDC's test centers, and finally, by the using command that developed the techniques and procedures for using the weapon. That meant duplication of many tests.

At SAC's Carswell AFB, Fort Worth, Tex., the B-58 Test Force, part of ARDC's Directorate of Systems Management, worked hand-in-glove with Convair engineers and reduced the eight phases to three categories that put the *Hustler* into operational use months early and saved several million dollars. In the first category Convair flight tested the bits and pieces of the supersonic bomber with the Test Force participating so that manufacturer's tests did not have to be duplicated later by the Air Force. The Directorate of Systems Management took over in category two for environmental flight testing under the most trying conditions—all-weather, and climatic testing in Florida at Eglin AFB's Climatic Laboratory and cold weather testing in Alaska. In

Test Force technician guides HUSTLER *to parking space after busy day of flying.*

category three, SAC, the using command, tested the B-58—a bomber, missile platform, or reconnaissance plane—as a combat weapon and trained its operating and support personnel.

The Test Force had more than 500 people, 34 of them pilots, who were assigned to the experimental test program of the B-58. Col. David M. Jones, ARDC Test Director, described them as "dedicated people bent on achieving successful completion of the tests as quickly as possible." Five of the pilots were from ARDC, all had logged more than 5,000 flying hours, and three were graduates of the Test Pilot's School at Edwards AFB, Calif. Colonel Jones completed his checkout in the B-58 in time to take an active part in the tests and flew the *Hustler* on several test flights.

When the tests were completed months ahead of schedule every component and the whole weapon system had been subjected to every stress and condition that it will ever encounter in real combat.

Colonel Jones beams HUSTLER *satisfaction.*

and pass the airmunitions

A gun, cocked and ready, has no potency unless there's a bullet in the chamber. For the Air Force the bullet is called airmuntions—a term which includes all ammunition and explosives, excluding nuclear.

From Hill AFB, Utah, OOAMA's Directorate of Airmunitions manages the Air Force's worldwide airmuntions program. Included is an inventory estimated at one million deadweight tons, stored in ZI and overseas depots. Value of the stock has been placed at some 1.3 billion dollars.

Every aircraft or missile weapon system has one or more explosive components or assemblies. It might be an aircraft engine starter assembly, an explosive bolt for jettisoning a wing tank or missile rocket launcher, an igniter for solid rocket propellents, or a missile motor.

Also included in the new airmunitions field are the family of high explosive bombs for high performance aircraft, 20 mm. ammunition for use in high-rate-of-fire aircraft, 2.75-inch air-to-air rockets, signal and flare devices, and photoflash bulbs.

The Hill-based directorate establishes explosive hazard and storage criteria and technical direction of the explosive inspection and disposal programs. Its commodity, airmunitions, is peculiar by nature. It must have the quality of reliability, for unlike most other products, items of airmunitions cannot be given a test run before they are fired or expended. In a one-shot proposition, each explosive must function as and when intended.

—*Hill Top Times,* Hill AFB, Utah

(Special to THE AIRMAN)

THE VOICE HEARD AROUND THE WORLD

a new boon to U. S. servicemen stationed overseas.

Raymond Swing, Voice of America news analyst, noted war correspondent, world traveler, and author appears on daily English language service.

by Robert deT. Lawrence, *Lt. Col., USAFR*

AIRMEN and their dependents stationed almost anywhere in the world can now keep in close touch with events in the United States through the greatly expanded Voice of America English service which broadcasts news and features every hour on the hour over a global range.

What is more, the ordinary family radio without shortwave, can easily bring in many of these programs, especially in the Far East and European areas.

News is broadcast for 15 minutes every hour at the beginning of the hour, and this is followed by feature programs which cater to a wide variety of interests. Features may be music (popular or classical), art, science, education, medicine, agriculture, women's affairs, politics, government, foreign relations, labor, theater, sports, and other subjects.

The broader content of the news coverage, scheduled more frequently and boosted by a greater number of transmitters with added power, are part of a build-up which began last fall.

At that time it was decided to increase the broadcasts in English because of its worldwide acceptance as a second language, and, in addition, to enable the VOA to program more prominent American speakers, actors, and other talent. Important, too, was the fact that English is not jammed in Communist Russia and China, whereas with other language broadcasts the USSR spends over an estimated $100,000,000 per year on jamming interference.

The English service is one of 37 different languages the Voice broadcasts daily over 76 powerful transmitters situated at strategic points around the world. It first went into operation shortly after the attack on Pearl Harbor, when the United States sought to tell the truth about its participation in the second world war.

Today, the Voice of America, speaking for the U. S. Government as the radio service of the U. S. Information Agency, provides millions of listeners in many parts of the world with objective newscasts, up-to-the-minute facts about U. S. policies, and information concerning the life and culture of the American people.

In the Free World, the Voice programs complement the many and varied informational activities of approximately 200 USIS posts to give foreign audiences a complete picture of this country. But in the Communist controlled areas, encircled by curtains of censorship and heavy restrictions on the free flow of information, the United States must rely almost entirely upon the Voice of America.

Audience mail and reception reports from 129 countries sometimes amounts to more than a thousand letters per month to the English service alone. Many other indications of the effectiveness of the Voice come from behind the iron curtains. Three-fourths of the hundreds of persons who escaped to the Free World during the Hungarian uprising of 1956 said that they had listened to the Voice of America.

Airmen and their families, American tourists and business people when they are travelling abroad, can consider themselves part of the United States information program. With a fair knowledge of our country's foreign policy, much of which can be gained from listening to VOA's English service, they can discuss matters of international interest with their foreign friends and thus contribute to goodwill and understanding. Broadcast schedules can be obtained from USIS offices which are located in the larger cities of other countries.

A thumbnail description of some of the more important programs follows:

Press Conference U. S. A., broadcast each Sunday, is a panel show featuring well-known guests in a field that is important in the news and three correspondents from the Washington press corps.

Commentator's Digest, broadcast Mondays and Thursdays, is a cross-section of opinions and reports from American radio and TV news analysts who express various opinions, pro and con, on the key issues of the day.

America This Week, broadcast every Saturday, is a weekend wrap-up of top events of the week in the U. S.

Sports Arena, broadcast each Sunday by Hamilton Richardson, Davis Cup star of 1958, discusses sports and interviews people.

Press Opinion U. S. A., Tuesdays and Fridays, reports on editorials from U. S. newspapers on significant topics of the day.

Washington Interview, every other week on Fridays, features Joseph McCaffry, Washington commentator, who interviews leading public figures, especially members of Congress.

UN Week, each Sunday, is a review of the week's events at the United Nations.

UN Review, broadcast Mondays through Saturdays, reports on the daily happenings at the UN.

Report to the Near East — *Report to South Asia*
Report to the Far East — *Report to Europe*
Report to Africa — *Report to Latin America*

Regional shows, featuring visitors to the U. S. from these areas, commentaries, and features that cover a wide variety of subjects.

Labor World, broadcast each Saturday, three times per month by John Herling, well-known labor columnist, reports on labor news and once per month Liston Oak, VOA labor specialist, interviews labor figures.

Economic Newsletter, each Monday by Austin Kiplinger, Jr., publisher of the widely read Kiplinger Newsletter, comments on the economic scene.

Medicine Today is a continuing series on the latest medical advances.

New Horizons in Science is broadcast each Thursday on important science news.

Forum, Mondays through Saturdays, presents high-level lectures on the natural and physical sciences, the humanities, and human relations, by leading American scientists and educators.

Perspective, Wednesdays and Saturdays, provides rebroadcasts of programs originally presented by educational and commercial U. S. radio stations. They cover literature, art, drama, science, and politics presented in these fields.

Benny Goodman, internationally famous band leader, clarinetist, composer, and recording artist, is interviewed by Willis Conover, MUSIC USA host, on Voice of America's "Salute to Irving Berlin" program.

in my opinion

A Theory of Practice

by 1st Lt. Arthur M. Lieberman
Westover AFB, Mass.

In today's split-second Air Force "the whites of their eyes" are visible a thousand miles away. Time—measured not in hours or days, but in minutes—bridges the gap between chaos, destruction, and servitude; and eventual triumph. Our well-publicized readiness is probably the greatest deterrent to the outbreak of a "hot" war. The enemy's fear of instant and devastating retaliation has kept immobile his striking power. We know we have developed a technological blueprint of the mechanics to go through should we be required to go to war. But we cannot and must not let ourselves be lulled into a false sense of security.

"Instinctive" action is the keyword to our defense, and this action can only be achieved through constant practice of operational plans. As in science, theory is the basis; applied science is the practical application of this theory. Only through trial and error are results achieved. Only through *doing* can our mistakes be evaluated. These mistakes brought to light can provide a basis not only for reevaluation of present concepts, but they can, to a great degree, provide an asymptote to perfection.

Practice develops the second nature required to bring to a successful conclusion those theories so well expounded on paper. A good ballplayer, a good pilot, and a good commander have more in common than a cursory observation might show. Each in his own way must meet an emergency with an instinctive reaction derived from constant practice. When a good halfback switches direction near the goal line and then goes over to score he hasn't spent an hour or even a minute mulling over the strategy in his mind. He does it because he recognizes the situation and he reacts—immediately. In the same way the time and effort spent in training a pilot to meet emergencies pay off when he acts with the same cool head and even temperament that have persevered during his training. Most problems confronting the commander can be solved with much forethought; but in the case of an emergency he must react both instantly and instinctively if we are to survive.

Today we are fighting the battle of time, and only through mechanical pursuit of an objective can we win that battle. We can proceed automatically to meet any emergency only when we have applied, tested, and repeatedly practiced those plans and theories set forth on paper. Remember—today time and distance are related by Mach numbers and *there is no room for indecision.*

clearing out dead wood and has produced most satisfactory results to date. Once again the editors would like to stress that surplus problems are not created overnight and cannot be alleviated that quickly either. Progress is being made.

★ ★ ★

CLASSIFICATION

Sir: *My AFSC is 43174, Flight Engineer Technician. As we seldom engage in any mechanical-type line work, could you explain why this particular job should be categorized with the maintenance career field?*

SSgt. Albert K. Byron III
Otis AFB, Mass.

According to the job description as outlined in paragraphs 2e and 3b of AFM 35-1, maintenance duties are an integral part of the flight engineer's job. Because of these requirements, the classification seems fully justified.

★ ★ ★

REPRINT REQUEST

Sir: *The article* Your Retirement Estate *in the August issue was most informative and enlightening. We would like permission to reprint it for distribution within our organization.*

Capt. Vic J. Pereckas
O'Hare International Airport, Ill.

Permission granted.

★ ★ ★

COVER COMPLIMENT

Sir: *I enjoyed your effective back cover with contrails and quatrain, on the August issue of* THE AIRMAN. *It was a well-played page. I would like to add that I have always found the magazine to be a fine combination of editorial and artwork and we here enjoy it thoroughly.*

W. R. Hilbrink
Columbus, Ohio

FOURTH TO FIRST

Sir: *Allow me to congratulate you on the excellent article* No Time to Train *which appeared in the August issue. At the same time, however, I note an error crept in. On page 47, you mention First, Tenth, and Fourteenth Air Forces. The First is no longer in existence. It should have read Fourth Air Force.*

Maj. Philip J. Mahar
Mitchel AFB, N. Y.

Major Mahar is quite correct.

★ ★ ★

RETRAINING

Sir: *I realize that you have answered this question before, but I would like a clarification. Could you please tell me which regulations govern retraining and how often supplements to these regulations are modified?*

SSgt. Kenneth Estes
Grand Rapids AFS, Minn.

Two main regulations govern the USAF Retraining Program. AFR 39-8 deals with airmen utilization and on-the-job retraining programs. AFR 39-9 outlines the procedures involved in the formal retraining programs, both voluntary and directed. Other regs pertain to specific segments of training. There is no established period for publication of supplements to these regulations. Rather, they are revised as the need arises.

Sir: *I have a question regarding a statement which appeared in the article* Today's Missile Training Opportunities *in the August issue. You note that the 56670A AFSC is a resource skill for retraining into the B shredout. The same general information is contained in AFR 39-8, Attachment 3. However, I am having a problem getting a retraining request from the A to B field approved. Could you give me any advice?*

Name Withheld

According to officials in the Retraining and Control Utilization Branch, such retraining is dependent upon local requirements. Therefore, your eligibilty can only be determined by your parent personnel office and we suggest you contact them for a decision in your specific case.

Sir: *In* Today's Missile Training Opportunities, *you state that input AFSCs are primarily the 30, 32, and 42 career fields. I have a 32150E and am eligible and willing to train. Can you tell me what the procedure would be?*

A/2C James Bailey
McConnell AFB, Kans.

According to officials in the Directorate of Military Personnel, the 32 career field is one of those being considered for the missile training program. However, selection of personnel from categories such as yours will be under provisions contained in AFR 50-9 governing special training. Final selection of personnel for missile training is solely up to the using command. Base personnel officers can supply details regarding specific cases.

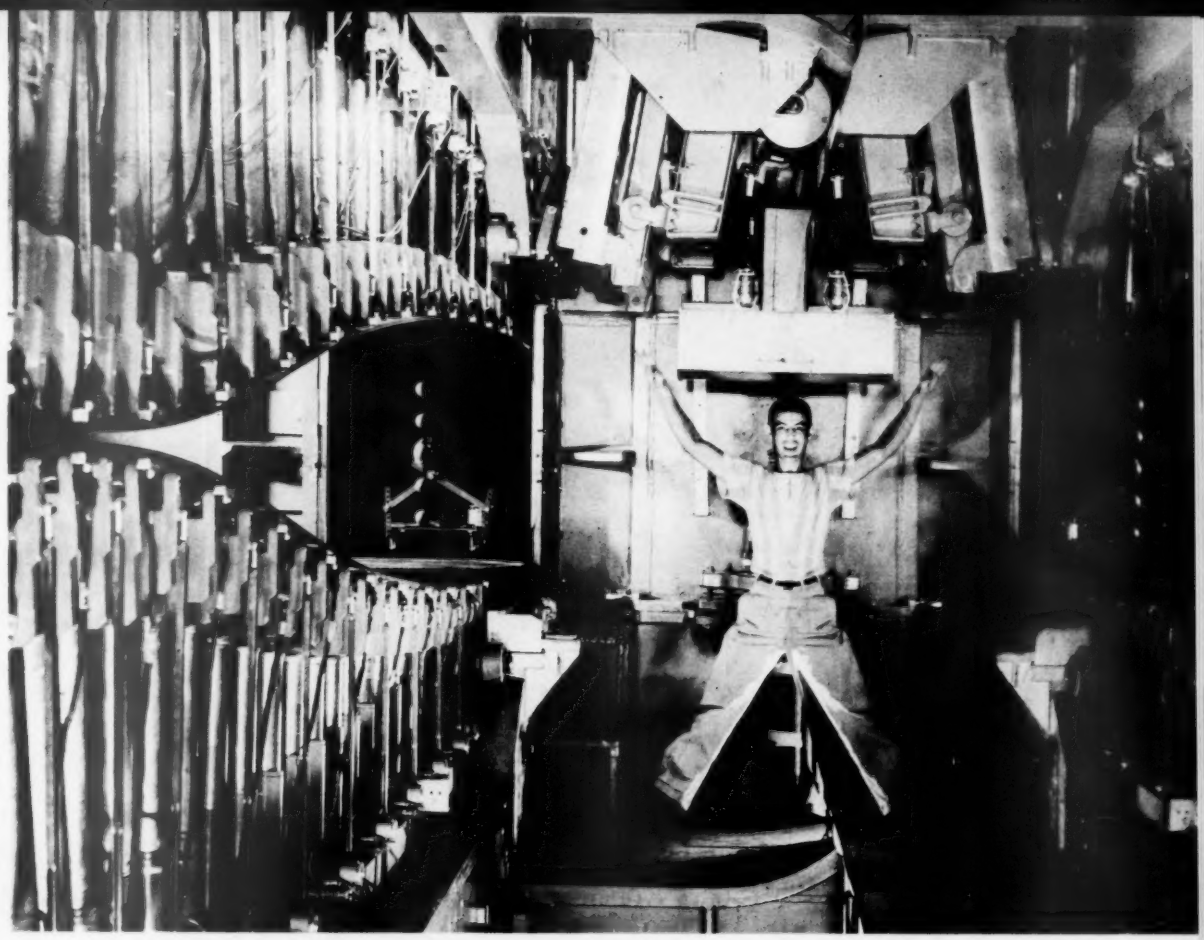
★ ★ ★

FROM THE PAST

Sir: *I realize that it has been a long time since the article appeared, but in rereading the July, 1958 issue of* THE AIRMAN, *I discovered what I believe to be an error. In the article,* Come in Tower *in* Airman's World, *you identified an AACS outfit in Europe as the 1246th. As I am assigned to the 1246th and we are in Korea, I think you must have erred.*

A/2C Howard Ragan
APO 970, San Francisco, Calif.

Reader Ragan is 100 percent correct. The organization should have been identified as the 1264th. Our apologies to both units.



Spit Shine

This is not the sort of photo one should show the youngsters just prior to Christmas. They might get those Daddy-get-me-one-of-those-things ideas. And you're right, it is a trick shot. Look closely and you can see that the right side of the picture is merely a reflection of the left. The shot is of the highly polished interior of a wind tunnel at the Arnold Engineering Development Center, Tullahoma, Tenn. You are also correct in assuming the technician is not floating—he's seated on a part of the complicated apparatus necessary for the multiple high-speed tests conducted within the tunnel.

Briefs from USAF, worldwide

AIRMAN'S WORLD

Instant Pilots

Not all the problems of a testing cycle revolve around the aircraft or piece of equipment.

As has been stressed time and time again, man is still an integral part of the system—and he creates problems all his own when he seeks to mesh with the mechanism.

A case in point is the current X-15 testing program being conducted at Edwards AFB, Calif. Preflight re-

quirements, briefings, and the necessity for pilots to breathe pure oxygen for an hour before high-altitude flight means that they are required to "suit out" early.

Inside their air-tight, full-pressure suits, the pilots were victimized by the soaring temperatures common to any desert area. The net result was excessive sweating with a corresponding loss of weight and efficiency. Doctors estimate that if such a loss should reach 10 pounds, the individually tailored MC-2 suits would completely lose their effectiveness.

Capt. Ralph N. Richardson, commander of the local 16th Physiological Training Flight, finally came up with the answer—a "man cooler"—a specially designed and refrigerated pilots' mobile dressing and prebreathing room. Weight losses, which had reached as high as 7.5 pounds in prior tests, have now been virtually eliminated.

The novel innovation has been fitted into a standard trailer-van and constructed largely from locally salvaged materials. Not only is the hour-long preflight problem solved, but the trailer can be hauled directly to plane-side thus eliminating the complication of rapidly changing temperatures which offset the preconditioning.

Desert Wings, Edwards AFB, Calif.

Draw, Pardner!

There is an immediate requirement for small arms technicians and instructors at the Marksmanship School, Lackland AFB, Tex.

Commanders will review personnel records to determine the availability of men possessing AFSCs in the 753X0 category. Additionally, qualified airmen possessing other AFSCs will be encouraged to apply for instructor duty, noting that AFM 35-1 establishes input from any career field for such positions.

Interested airmen should contact their personnel office and submit necessary applications in accordance with the instructions outlined in Chapter 7, Part Two, AFM 35-11.

One Year Later

Because of a hula hoop, TSgt. Thomas A. Holden of the local Maintenance Control Squadron has cause to celebrate Christmas a little early this year.

Last year, Sergeant Holden spent the holiday hospitalized as a result of serious injuries incurred in a Christmas Eve automobile accident. This year, he is nearly back to normal following a complicated hip operation and aid from an unexpected source.

Holden's leg was so badly injured in the accident that medics were forced to cut several hip muscles and insert a metal rod in the shattered bone to strengthen it.

After his release from the hospital, the sergeant was advised to get as much exercise as possible to assist the healing process. However, because of the seriousness of the operation, the activities available to the convalescent were extremely limited.

Then Holden stumbled onto a useable child's toy—a hula hoop. Remembering he had once gained proficiency with the plastic ring in order to keep pace with his children, Holden turned to the hoop for aid.

Devoting but 10 minutes a day to its use, within weeks he was able to improve his condition so much that he now walks with only the slightest limp.

Wingman, RAF Station Wethersfield, England

News to Minnesota

A/1C Lawrence R. Gay recently wrote to an outstate midwestern company for insurance on his privately-owned automobile and received the following answer, properly addressed to his station at Duluth Municipal Airport, Minn.

"Dear Sir: We regret that we cannot accept your application for insurance because your address indicates you are overseas. Suggest you apply to our home office."

The Jet O Scope, Duluth Municipal Apt., Minn.

←

AIRPOWER BRAKES that open outward to slow down the 1,300-m.p.h. Republic F-105 *Thunderchief* provide an interesting study in air-age patterns. This view is from inside the afterburner section of the fuselage and shows the powerful "cloverleaf" speed brakes in a retracted position. The F-105 is the newest of USAF's all-weather fighter-bombers.

A NEW METHOD OF "BUILDING" has been developed by ARDC's Rome Air Development Center and is being tested at Griffiss AFB, N. Y. The result has been a series of cocoon-shaped shelters known as "spray domes," and their use may well spell the end of conventional construction methods in certain situations. Using an air-inflated plastic film mold and a glass and resin spray gun, serviceable shelters have been constructed. They are capable of withstanding up to two inches of ice and snow and winds of 100 m.p.h.

→

BATTLE DAMAGE might well be the phrase used to describe the gaping 10-inch hole torn in the quarter-inch steel nose covering on one of the famed rocket sleds at Holloman AFB, N. Mex. In reality, it was caused by striking a bird unable to hear the approach of the sled at 3,000 m.p.h. Birds perched along the rail constitute a major hazard so officials at ARDC's AFMDC have wired the tracks for sound. The familiar sled-dash is now accompanied by recorded gun blasts and hawk cries, to panic the birds and clear the seven-mile stretch of track.

Bits of Blue

. . . Eight New Orleans APOs recently became branches of the New York post office although their numbers remain the same. Reason for the switch was to expedite mail movements to these areas through the increased frequency of air and surface transportation out of the New York port.

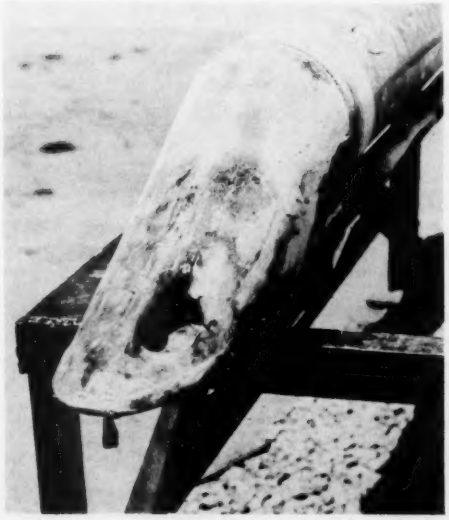
. . . A revised AFM 35-1 was placed in distribution channels the first of the current month. Most significant changes include updating of individual airmen AFSCs and career fields; reclassification of warrant officer and airmen career fields to officer occupational fields; and identification of airmen in pay grades E-8 and E-9 at the superintendent, 9-level skill. Classification actions required by the revisions become effective February 29, 1960.

. . . The Chief of Engineers has been directed to dispose of approximately 970 acres of government property at the Arnold Engineering Development Center. A small parcel is scheduled to be transferred, at fair market value, to the adjacent city of Tullahoma, Tenn.

. . . New and revised editions of the USAF Supervisory Examination and of selected Airman Proficiency Tests will be available for use early in 1960. The Supervisory Examination will be administered in February as will the APT in the 90 (medical) career field. New proficiency tests in the 57 (fire protection) and 70 (administrative) fields will be available in April.

. . . Officials at Webb AFB, Tex., are claiming a "first" for their recently graduated Class 60-B. Lt. Yukitaka Muramoto of the Japanese Air Force won the Distinguished Graduate Trophy for his accomplishments as a student. Officials believe he is the first Allied Mutual Assistance Pact student to be so honored.

. . . A tip of THE AIRMAN'S cap to Sembacn AB, Germany for its recently won distinction of becoming USAF's first tactical missile base in history.



COMBINING ZERO LAUNCH with a newly developed "atomic" shed, ARDC recently completed a novel and successful test at Holloman AFB, N. Mex. Object was to determine if an aircraft could be enclosed in an atomic bombproof shelter, then blasted into the air in a retaliatory effort. Interior of the cavelike cell is covered with an acoustical material to absorb takeoff noises and vented to exhaust resultant gases. The shelter itself is constructed from steel framework and tons of poured concrete. Take-off distance for the F-100 was less than one inch. Within seconds its speed was 275 m.p.h. and within another few moments, supersonic.

You Ask It

Q. Would you please clarify retraining status for me? Which AFSCs can cross-train and which are on formal retraining eligibility lists?

A. Two separate regulations govern. Full information on both phases is contained in AFR 39-8, *Airman Utilization and On-the-Job Training,* and AFR 39-9, *USAF School Retraining Programs.*

Q. Could you please tell me where I may obtain a copy of the revised Airman's Guide?

A. Your base exchange should have copies in stock. In the event they do not, you may order directly from the publisher, The Stackpole Co., Harrisburg, Pa.

Q. Can you tell me when USAF-wide promotion restrictions went into effect?

A. According to DCS/P, Hq USAF, unit vacancy requirements were established in 1954. The same year, this requirement was waived and command vacancy requirements established. In April, 1956, the restriction was upped to USAF vacancy level. However, even since that date, restrictions have been lifted in certain fields for single promotion cycles.

Q. Could you please give me the proper procedure for application for USAF Instructor Training School?

A. Most details on assignments of this nature are contained in AFM 35-11, *Military Personnel Assignment Manual.* In this particular case, procedure is outlined in Chapter 7, Part Two. Additional eligibility requirements were published in an all-commands message, AFPMP-2A 154971, dated 22 December 1958.

Q. Do you know of any plan that might be contemplated to provide for promotion to the next highest pay grade for personnel retiring from frozen career fields?

A. This is something which the Air Force may not accomplish alone. Present Federal retirement laws provide for retirement in grades in which individuals have actively served. Any change in this policy would have to be accomplished by additional laws and such changes are not presently contemplated.

Q. Could you give me an interpretation of Article XXII of the Constitution? Does the two-term restriction apply only to consecutive terms?

A. The amendment reads, "No person shall be elected to the office of President more than twice, and no person who has held the office of President, or acted as President, for more than two thirds of a term to which some other person was elected shall be elected to the office of President more than once." Two terms are the maximum regardless of whether or not they are consecutive.

Q. I expect to be discharged in time to enter college in the spring semester under the GI bill. At present I am still not certain as to my course of study. Do you know of anywhere I may be able to obtain professional help in making such a selection?

A. Yes. The VA offers expert assistance in planning a course of study. You should apply to them for vocational counseling to determine, scientifically, the most logical course of study to pursue.

Q. I have a WW II GI term insurance policy. May I borrow on it?

A. No. GI term insurance has no loan value. However, such policies are convertible to a permanent plan, and these plans build up loan values after they have been in force for only a year.

Right of Way

The problems involved in getting an aircraft aloft are numerous—and apparently not peculiar to USAF alone.

The following story is reprinted from the *RAF Air Mail* by way of the *Centurion,* base paper of RAF Station Bentwaters, England.

A squadron of *Vulcans* was practicing formation takeoffs. They had just begun to roll down the runway when a country yokel cycled across the runway half-way along. The leading aircraft narrowly missed him.

The cyclist was taken to the control tower, and the controller said, "Surely, man, you know you should take precautions before crossing the runway."

"Oh, I did," was the reply. "I rang my bell."

Supersonic Archeology

Kings of ancient, Middle East empires never dreamed their regal palaces would serve as aids to supersonic navigation, but that's what happened to them during the 429th Tactical Fighter Squadron's recent deployment to Turkey.

Pilots of the 429th found the Turkish terrain lacked the navigational devices to which they were accustomed but that didn't stop them from employing a little Yankee ingenutiy.

Those ruins with distinctive features were turned into supersonic archeological navigational aids and used as turning points and simulated targets on low-level high-speed missions.

Precise flight plans were prepared which read like battle formations of yesteryear—from aqueduct to castle to ancient bridge. Some of the ruins even served nicely as simulated convoys, bodies of troops, and supply dumps for the squadron's dry-run passes.

—by 1st Lt. Douglas S. Johnson
Mach Meter, Cannon AFB, N. Mex.

Ingenuity

A couple of old bed rails and a few washing-machine parts are making it easier and safer for mechanics to remove ejection seats from USAF jets at Edwards AFB, Calif.

At least two men were required to operate the previously used costly and dangerous block-and-tackle method of removing downward ejection seats from Lockheed F-104 *Starfighter* series aircraft. Additionally, during the removal process, both were directly in line with the explosive charge which fires to eject the seat.

A civilian employee, Thomas Calandra, considered the problem and then devised a new device capable of being operated by one man who remains clear of the danger area at all times.

A winch-type device is fitted atop the seat frame and a cable attached to the rear of the seat. The cable is connected to a ratchet-equipped handle which allows the operator to halt the seat at any point during removal or installation.

Although designed specifically for F-104s, a study is now being conducted to adapt the device to other aircraft equipped with ejection seats. Its total construction cost is less than $20.

65-Day Week

It's the policy of Opheim AFS, Mont., that a medic be on duty at all times. This can create more than a little hardship, for only one medic is assigned to the 779th AC&W Squadron.

Just recently, SSgt. Hogue enjoyed his first day off after 65 continuous days of duty. His benefactor was a medic from nearby Glasgow AFB, Mont.

Star Gazing

The 1381st Geodetic Survey Squadron, Orlando AFB, Fla., has a unique distinction—it's the only one of its kind anywhere in USAF.

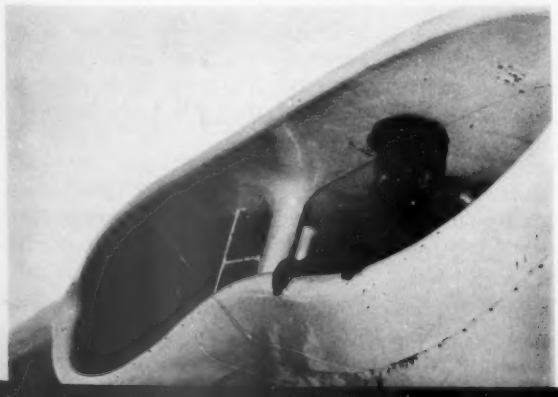
Formed only recently, the unit is charged with determining, with pinpoint accuracy, the exact geographical locations of selected missile sites which will be employed by USAF around the world.

In addition, the 85-man unit is also developing a complete ground survey capability. Assigned personnel are being trained to make astronomic and gravity surveys, techniques to be employed in locating HIRAN stations in relationship to the stars and the center of the earth.

Such accurate locations will add a further degree of refinement, without which the plotting of an accurate missile course would be impossible.

In carrying out this vital task, the new Air Photographic and Charting Service (MATS) squadron will work in close cooperation with the U. S. Coast and Geodetic Survey, other branches of the Armed Forces, and similar agencies of other Free World governments.

The Chanticleer, Orlando AFB, Fla.



USAF MEN ARE not the only airmen serving at overseas stations in support of Free World air forces. Here, Cpl. Barron Buggy conducts an engine inspection on a westbound RAF *Valiant* at Offutt AFB, Nebr. Five officers and 31 airmen of Britain's Royal Air Force comprise the Offutt AFB detachment on the RAF "westabout" trunk route between England and Christmas Island in the Pacific. The unit is charged with refueling, maintenance, and personnel assistance for aircraft and crews flying replacements and supplies to their bases between these two terminals.

Air Age Library

Professional

The Joint and Combined Staff Officer's Manual, Col. Jack D. Nicholas, USAF; Col. George B. Pickett, USA; Capt. William O. Sears, Jr., USN, (The Stackpole Co., $4.50). Designed primarily as a guide for officers assigned to U. S. joint or allied combined commands, the book has daily application for all officers. It contains a compilation of joint principles and procedures and describes operational planning underlying joint and combined action.

U. S. Air Force Academy: The Life of a Cadet, Jack Engman, (Lothrop, Lee, and Shepard, $3.50). This is a revision of an earlier book which was published while the Academy was in temporary quarters. There are more than 250 pictures, including several of the new Colorado Springs campus.

Related Reading

Flattop, Barrett Gallagher, (Doubleday and Co., Inc., $5.95). Done in photo journalism style, the book tells the story of the introduction and development of the carrier as a weapon of war. Several senior officers of the Navy and Marine Corps have also contributed additional material to the volume.

The Answer Book on Air Force Social Customs, Ester Wier and Dorothy Coffin Hickey, (The Stackpole Co., $3.50). A ready-reference source on social customs and procedures compiled in efficient question and answer form. In addition, a special section on USAF terms is designed to give the wife a better understanding of professional jargon.

There Shall Be Wings: A History of the Royal Canadian Air Force, Leslie Roberts, (Clarke, Irwin, and Co., Toronto, Canada, $5.00). RCAF history begins in 1923 and grows through two wars and the sandwiched intervals of peace. Current problems, the Canadian contributions to NORAD, and the controversy of aircraft vs. missiles are all discussed in easy, readable fashion.

Paperbacks

Boeing 707, Martin Caidin, Ballantine.

Rocket Manual for Amateurs, B. F. Brinely, Ballantine.

Off the Beaten Orbit, edited by Judith Merrill, Pyramid.

The Counterfeit Traitor, Alexander Klein, Perma Books.

You and the Universe, N. J. Berrill, Premier.

Thunderbolt, Robert Johnson with Martin Caidin, Ballantine.

Baa, Baa, Black Sheep, Gregory Boyington, Dell.

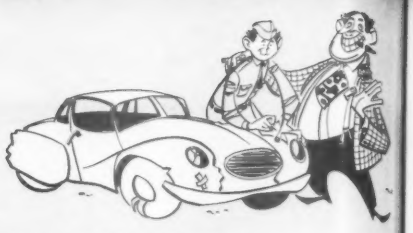
Command Decision, William Haines, Bantam.

Mig Alley, Robert Eunson, Ace.

Count Five and Die, Harry Wynne, Ballantine.

10,000 Eyes, Richard Collier, Pyramid.

Battle for the Rhine, R. W. Thompson, Ballantine.



No Money Down--- Easy Monthly Payments

by Col. Edwin R. Bane, *Commander, Sewart AFB, Tenn.*

If the title of this article enticed you to read further, you are one of the persons easily attracted by advertisements using this legend.

Your automobile is probably financed, and you may be making payments on a refrigerator, television, vacuum cleaner, or encyclopedia. Chances are you also owe grocery, gasoline, or other bills, and now you are thinking of buying an air conditioner—on credit of course. But even now, the major part of your monthly paycheck goes to your creditors.

Credit is a fine, useful thing—our economy could not function without it—and the serviceman, with limited but dependable income, can use it to great advantage. He is, after all, insulated from many serious financial emergencies by medicare, free dental care, the Red Cross, and other benefits and agencies.

Easy credit, however, means easy buying and sometimes overbuying and overobligation —and then you are in trouble. You delay paying one creditor to satisfy another; then you borrow from a finance company to "consolidate" your debts in an attempt to keep your head above the financial waters—and the added interest and other charges you must pay only plunge you deeper into debt. Too late you learn *you cannot borrow yourself out of debt.*

Then comes the crisis: your working wife must leave her job; your car breaks down; there is a mistake in your pay; or you must bear the added expense of a change in station. Your payments are late and letters from your creditors flood your commander. You see, in your mind, the pattern of your downfall—first, "friendly" conferences with your commander; then a reprimand; then loss of a stripe under Article 15; later, maybe even trial by courts martial or discharge for "unfitness."

This happens much more often than you think. It *could* happen to you unless you follow the precepts of buying *only what you need* and *only what you can pay for* after reserving a comfortable percentage of your income for your ordinary expenses, savings, and any emergencies which might arise.

—from *The Carrier's Courier,* Sewart AFB

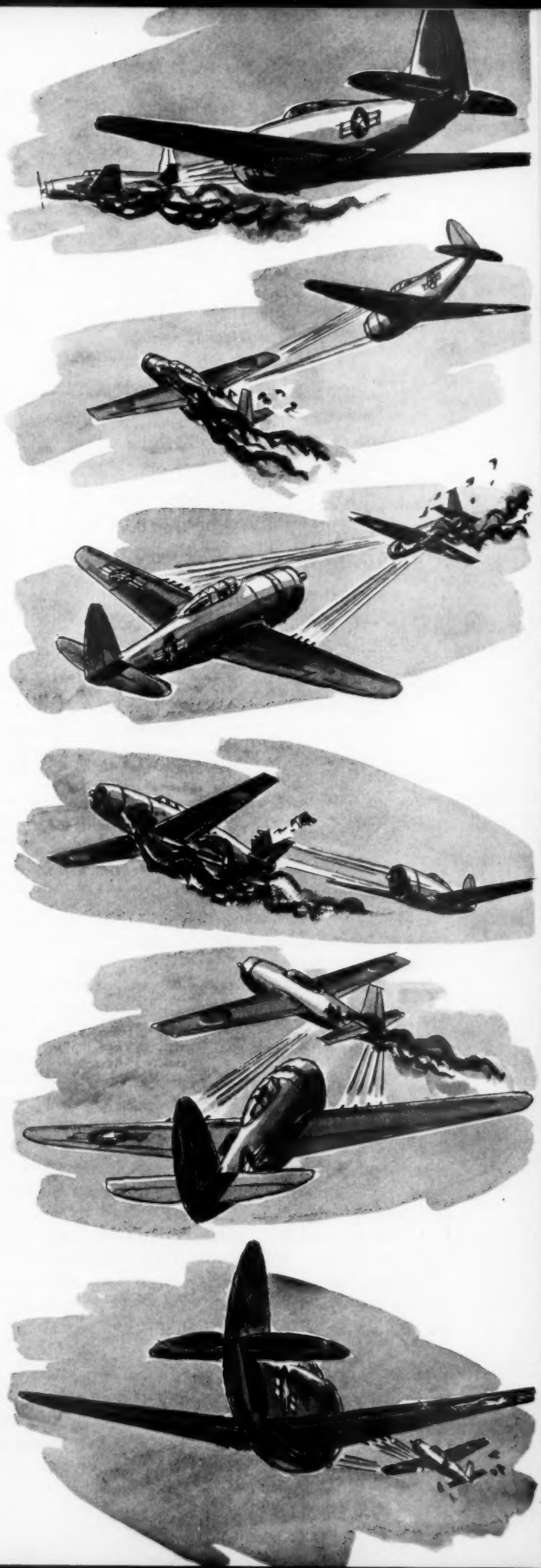
In the Name of Congress

No. 15 IN A SERIES

CHEAPER BY THE HALF DOZEN

by SMSgt. Hal Bamford

The fall of Lae and Salamaua in mid-September did not mark the end of the aerial campaign in New Guinea. As the air war pushed on into October, it resulted in an individual, record victory for a single mission.



ON June 20, 1943, Lt. Col. Neel Kearby arrived in Brisbane, Australia. On January 6, 1944, General Order No. 3 awarded him the Medal of Honor. Nearly two months later, March 4, 1944, Colonel Kearby was dead—a victim of aerial combat over Wewak, New Guinea.

His combat tour was short—less than nine months, but during that period he wrote a chapter in aerial history which has few equals. Through his efforts, the Republic P-47 *Thunderbolt* was introduced in the Pacific and won respect as a combat-worthy vehicle. Kearby recorded 22 official victories—plus two unofficial ones on his final mission. But most important, he became the first American pilot to score six victories on a single mission. It might well have been seven in one battle but for lack of enough camera gun film to confirm the kill.

Lt. Col. Neel Kearby was a dedicated fighter pilot, not given to swashbuckling, but confident of his ability and sold on the aircraft which was to earn a fabulous reputation as the "Jug" before World War II ended.

Gen. George C. Kenney described him as a short, slight, keen-eyed, black-haired Texan, about 32 years old when he arrived in Australia. As an indication of his eagerness to excel in the growing aerial war, the 5th Air Force commander noted that "about two minutes after he introduced himself, he wanted to know

Col. Neel Kearby

who had the highest score for shooting down Jap aircraft."

The arrival of Colonel Kearby and the *Thunderbolts* created a new fighter outfit for the Pacific air war—the 348th Fighter Group.

The young Texas colonel worked his men hard to prepare them for their baptism of fire. Within a month after their arrival in Australia, the group moved north to Port Moresby.

Since droppable wing tanks had not arrived, special tanks had to be designed and ordered from an Australian company. Consequently, the 348th did not participate in its first full-scale combat until August 16. That day they scored their first victories, downing four opponents with a single loss.

During the months of August and September in the air offensive against Wewak, Kearby's 348th polished its proficiency to a high sheen in the raids which paid handsome dividends.

Throughout this period, the devastating raids on the Wewak area dealt what appeared to be a stunning blow to enemy aerial operations in the eastern sector of New Guinea. Reconnaissance photos showed that while the Japanese saw fit to fill in bomb craters and repair damaged runways on Wewak, they had no inclination to move aircraft onto the much-blasted bases. Replacement aircraft were moved in to more western bases at Wakde Island, Hollandia, and Tadji.

On the morning of October 11, 1943, Kearby and three members of the "headquarters flight," Maj. Raymond Gallagher, Capt. John Moore, and Capt. William Dunham, took off on what they expected to be the daily routine patrol. They were soon to learn differently. The citation which was to award Colonel Kearby USAF's 22d Medal of Honor graphically describes the unroutine nature of the ensuing action.

For conspicuous gallantry and intrepidity above and beyond the call of duty in action with the enemy. Colonel Kearby volunteered to lead a flight of four fighters to reconnoiter the strongly defended enemy base at Wewak. Having observed enemy installations and reinforcements at four airfields, and secured important tactical information, he saw an enemy fighter below him, made a diving attack and shot it down in flames. The small formation then sighted approximately 12 enemy bombers accompanied by 36 fighters. Although his mission had been completed, his fuel was running low, and the numerical odds were 12 to 1, he gave the signal to attack. Diving into the midst of the enemy planes he shot down three in quick succession. Observing one of his comrades with two enemy fighters in pursuit, he destroyed both enemy aircraft. The enemy broke off in large numbers to make a multiple attack on his airplane but despite his peril he made one more pass before seeking cloud protection. Coming into the clear, he called his flight together and led them to a friendly base. Colonel Kearby brought down six enemy aircraft in this action, undertaken with superb daring after his mission was completed.

After return to his home station, Kearby filed a claim for seven victories. While testimony of flight members and gun camera film confirmed the six, the other three pilots had been too busy on their own and his camera had run out of film just as the colonel's fire began to tear into a seventh aircraft. Consequently, the final victory of the day was never confirmed, but the six official wins ran his total to 14.

In addition to his superb personal score, Kearby's inspirational leadership was also evident in the record of the unit he commanded. At the close of 1943, after only 37 combat missions, the unit posted 162 victories with a loss of only two aircraft.

Through the following months, Colonel Kearby steadily added other victories until his total reached 22, a figure which tied him with Capt. Dick Bong as the area's leading ace.

On March 4, 1944, he decided that the time had arrived to break the tie with his friendly rival. Again with his headquarters flight, now known as the Three Musketeers, Kearby headed for the much-attacked Wewak area. A short distance from the target, the flight spotted a formation of 15 enemy aircraft.

They immediately plunged to the attack. Kearby scored a win with his first quick burst, turned tightly, and fired a long-range shot into the formation. A second victim tumbled from the group but, as the American ace pulled away, three Japanese fighters fell in from above and behind him.

His wingmen managed to pick off two of the attackers, but the third poured a burst directly into Kearby's cockpit. His aircraft never came out of the dive he had assumed in an effort to shake his pursuers. It crashed into the jungle bordering the airdrome at Dagua, near Wewak.

Ironically, the same day, Capt. Richard Bong also scored his 23rd and 24th victories—both confirmed.

A new $3,000,000 missile training facility at Sheppard AFB, Tex., was named Neel Kearby Hall two weeks ago in honor of the late Col. Neel E. Kearby who was awarded the Medal of Honor for shooting down 22 Japanese planes in the Pacific during WW II. Robert Neel Kearby, eldest son of the Texas-born hero, was guest of honor at the ceremony.

BREAKING THE LANGUAGE BARRIER

WHAT happens when a Turkish pilot flying an American-built plane out of a base in Italy runs into weather over the English Channel and decides to land his aircraft in France? Such situations as this frequently arise all over the world, and —fortunately for all concerned—the difficulties generated by diverse languages are no longer as serious as they once were.

A share of the credit for eliminating language barriers in international aviation belongs to the USAF Language School for Allied Students at Lackland AFB, Tex. This unique institution—the only one of its kind in the Air Force—teaches English to pilots and specialized students from dozens of countries all over the world.

The school was organized along relatively modest lines in 1951 at Randolph Air Force Base when the air forces of NATO were preparing for the international team organized to frustrate Communist ambitions. Since moving to Lackland in 1953 with its complement of seven instructors, the organization has grown to a full-size institution with over 40 teachers, modern classrooms and training aids, and up-to-date laboratory equipment.

Students from 45 Free World nations have studied at the school before going on to specialized training as pilots, navigators, technicians, or traffic specialists. Graduates are currently enrolled in 36 different training courses at 20 bases throughout the continental United States.

Average student load is about 200 persons ranging in military grades from the lowest enlisted to the top field. The full training course occupies 15 weeks and is divided into two phases: Fundamental English and Aviation English. Fundamental English covers functional grammar, reading and writing practice, and conversational development. Aviation English deals with official and technical terms, with particular emphasis on idioms used by airmen generally.

In the latter phase, students practice in a classroom using the phrases, sentences, and technical nomenclature which make up the language of airpower. Tape-recorder sessions in the laboratory are especially helpful in polishing pronunciation.

Candidates for training in the United States are selected by officials of the parent country—usually with the help of U. S. MAAG/Mission personnel—on the basis of aptitude to fulfill their respective country's requirements for airpower

Difficulties in pronouncing unfamiliar terms amuse these students from the Philippine Air Force.

skills. As a part of the Mutual Security Program, this international training has played a large part in doubling, in about five years, the airpower strength of overseas allies.

The school also serves in a secondary sense as a medium of cultural exchange. Students are orientated in the customs likely to be encountered during their stay in the United States and are encouraged to participate in social activities with local citizens. And through the instrument of a common language students from Pakistan, South America, the Philippines, Europe, and other countries exchange their views in the harmonious atmosphere of a shared experience. It is such things as these that build the foundations for lasting peace and international understanding.

—TSgt. J. K. O'Doherty

Surprise Package

The sergeant handed me the letter he had been holding. "We got a packet of stamps through the mail a couple of months ago which we hadn't ordered," he said. "So I sent it back and now the company is threatening to sue if I don't send them money."

Indeed, the company was threatening to sue. The letter, written on imposing letterhead stationery, accused the sergeant of failing to take "proper steps" to safeguard the merchandise they claimed was lost through his fault and worth $19.00.

The company insisted it was the sergeant's duty to insure the parcel (which was actually nothing more than a small packet of cheap collector stamps worth, perhaps, twenty-five cents).

Since the sergeant had not insured the parcel, they continued, it was his legal responsibility to make good the claim value. If he didn't, the letter hinted darkly, he would be sued and his credit rating irreparably damaged.

Hogwash!

Solicitation by means of unordered merchandise sent through the mail is a practice which is quite prevalent. The number of parcels deposited into the mails under one type of unordered merchandise scheme or another runs incredibly, into the billions yearly.

Ordinarily, if the solicitation is legitimate, it is merely a nuisance to the recipient. Unfortunately, it also is a practice which is employed by bunkum outfits and such solicitations are teeming with fraud.

When you receive unordered merchandise through the mail which you do not want, the SIMPLEST and BEST step for you to take is to pick up a piece of marking crayon and write the word "REFUSED" with a firm hand upon the package, then give it back to the postman.

If your inquisitive nature has caused you to open the parcel, you are still on firm ground. You have several alternatives:

(1) Wrap the parcel again and mail it back. There is no requirement that you insure the merchandise.

(2) Put the package in a closet without using the item. Your only obligation is to return it to the shipper if he comes after it within a reasonable period of time.

If he doesn't call for it after a reasonable period has passed, you may chuck the parcel into the trash.

In any event, you are under no obligation, whatsoever, to send acknowledgement of receipt, return it, or to pay for the item *unless* you have used it.

If the nature of the organization which sent unordered merchandise is such that they follow the parcel with letters demanding immediate payment of the fancied price of the article, you may toss the letters away without second thought.

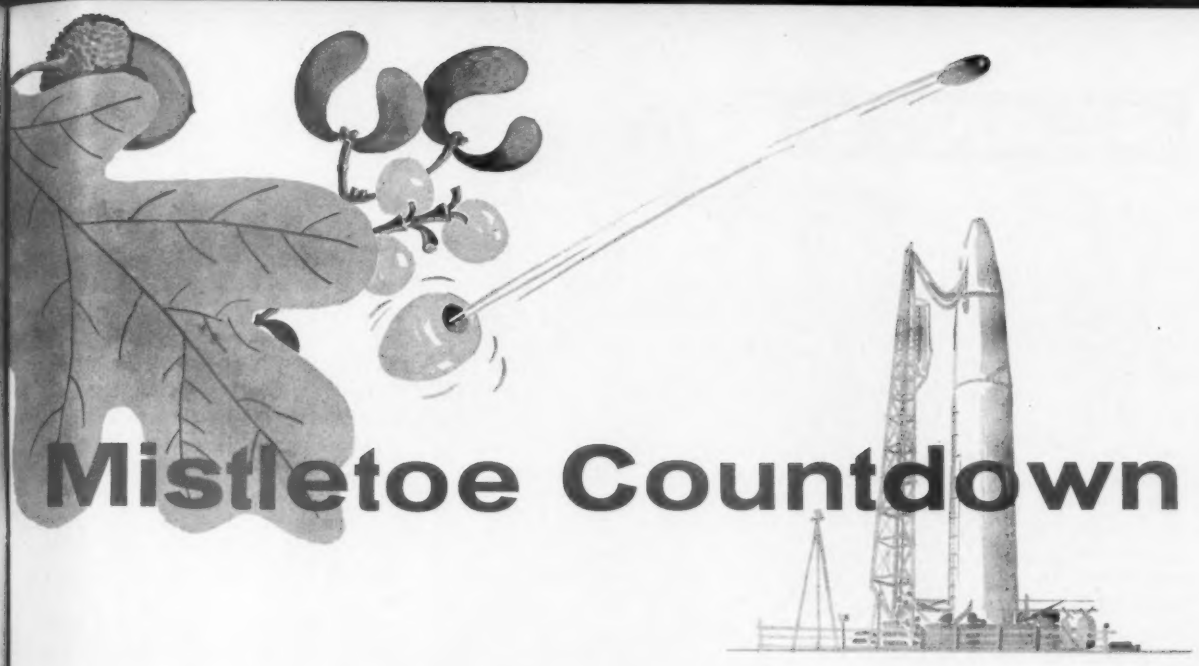
If the letter received contains threats it is a matter for the nearest Postal Inspector.

The answer which was prepared for the sergeant read something like this:

Dear Sir: I found your letter very amusing. I intend to share my amusement with the Better Business Bureau and the United States Postal Inspector. After we have all enjoyed a chuckle, I intend to file a complaint against your organization. The day of the use of the mails for intimidation is past.

Yours truly

—by Capt. Edward A. Molnar
Hahn Hawk,
Hahn AB, Germany



Mistletoe Countdown

With Yuletide coming mistletoe will again be encouraging the traditional exchange of festive kisses but if the onlookers happen to include a rocket research man who wears an expression of wistful envy, don't get the wrong idea.

The seasonal spray of evergreen leaves with white, translucent berries has ceased to be just another happy touch among Christmasy decorations. This year for the first time it has also become a taunting reminder that nature long has possessed a ballistic propulsion system with a performance factor utterly fantastic by the modern technological standards of mere man.

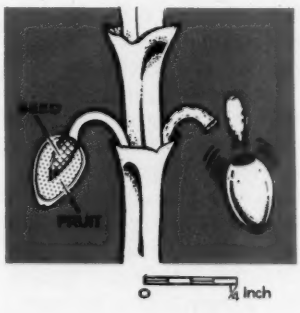
Research now has established there is a widespread American species of mistletoe which "explodes" its tear-shaped seeds into ballistic trajectories with an initial velocity computed at almost 5,000 Gs per second. That is approximately 100 times greater than the peak acceleration of typical rocket systems currently in use.

Launch efficiency is likewise something to stagger the imagination; it takes only four ten-thousandths of a second to pop the seed into its trajectory—a process requiring some minutes for cone payloads devised by man.

This new knowledge about a member of the mistletoe family was developed by F. G. Hawksworth, of the U. S. Forest Service, who worked with a dwarf species which has the botanical name *Arceuthobium vaginatum*. His findings are described in a professional paper appearing in the weekly publication, *Science*.

Hawksworth describes the explosive fruit or berries of this variety as "one of the most efficient mechanical seed dispersal mechanisms in any of the higher plants." Here is how this natural ballistic system operates:

The mistletoe seed—a tiny, streamlined "missile"—is housed in



the berrylike fruit until the latter ripens. As maturity approaches a break-off area develops where the plant stem caps the fruit. Simultaneously the ripening pulp within the fruit capsule keeps building up pressure on the seed at its center.

Once "launch" pressure is attained the seed shears off the capping stem of the fruit and shoots into trajectory at an initial velocity of 45 feet per second, while the fruit pod drops earthward very much in the manner of a jettisoned missile stage.

The seeds average nearly one-eighth of an inch in length and 0.000082 of an ounce in weight. Their terminal velocity is placed at almost 25 feet per second at the end of a vertical flight upward to 181 inches from "blast-off." Subsequent horizontal flight may be as much as 504 inches, with the average, 209 inches. A seed with maximum range trajectory would cover almost 5,500 times its own length.

Mistletoe is a semiparasitic plant which grows on trees such as oak. The dwarf variety of the shrub has an affinity for living on ponderosa pine.

Since very early times in recorded history mistletoe has figured importantly in the folklore and superstitions of peoples in many parts of the world. It was closely associated with the rites of the druids, the ancient religious men of the Celtic peoples in Ireland, Britain, and Gaul. Perhaps because many of the druids served as primitive practitioners of medicine, the mistletoe was ascribed curative powers for sickness. —WILLIAM A. KINNEY

SLANTS ON SPACE

/// A satellite put into transpolar orbit from Vandenberg AFB, Calif., can have virtual immunity from visual observation for months, provided it leaves its pad from a precise angle at a right time in the day.

If the launch is made during broad daylight or in the middle hours of the night sightings from the ground would not be possible for such a long period over most of the globe. Only observers at sites in the polar regions would have a chance of spotting the vehicle.

For the purpose of visual observation, the ideal blast-off times are just before sunup and toward the end of twilight in the evening. Launches during these periods would keep the satellite recurrently visible in the early or ebbing light daily anywhere from several days to weeks under favorable weather conditions. Exactly how long would depend on the orbital altitudes of the vehicle.

/ / /

/// A small statistic indicates the great service meteorological satellites can render a peaceful world. At present the main networks of weather observation stations are located in North America and northern Europe. The areas they cover represent less than three percent of the Earth's surface.

/ / /

/// In the darkening reaches of space an astronaut will behold the stars in their actual colors—red, orange, yellow, yellowish white, white, blueish white, and blue. They will appear as intense points of light in a background of jet black, above, below, and beyond the spacecraft. The familiar twinkle will be missing because of the absence of the atmospheric particles which produce that effect. Stellar colors are an index of a star's temperature. The range begins with the reds which have surface temperatures from under 3,600 to about 5,400 degrees Fahrenheit. At the other end of the scale are the blue-whites and blues whose temperatures soar from over 55,000 to as high as 180,000 degrees in some cases. Although that yellow star, our Sun, is far down the scale with a surface temperature in the order of 10,000 degrees, it will seem to burn with a painfully fierce brilliance for spacemen because at its distance of some 90 million miles it is mere minutes away as light travels whereas the next nearest star in our galaxy is more than 2,500 billion miles distant.

/ / /

/// Moon watching on Mars would be a very time consuming hobby for earthlings, and rather on the confusing side.

Phobos, one of the red planet's two satellites, races through a complete orbit every 7 hours and 39 minutes as compared with the 24 hours Mars requires to rotate once on its axis. This is the only known instance in the Solar System where a natural satellite takes less time to orbit than its planet does to rotate. Phobos averages a bit over 11 hours between successive risings and double-times from one Martian horizon to the other in a matter of four and a half hours.

Deimos, the second moon, orbits at the more leisurely rate of 30 hours and 18 minutes. Because of the planet's simultaneous rotation, this satellite remains visible above the horizon from any given surface point for two and a half Martian days at a time.

The satellites are unique in the Solar System also because they travel closer to the surface of Mars than any other natural moons do with regard to their respective planets. Phobos orbits at an average altitude of only 3,693 miles, while Deimos moves at a mean distance of 12,493 miles above the planet.

Discovered by the American astronomer, Asaph Hall, in 1877, the two celestial bodies are so small as to be called moonlets. Phobos has a diameter variously estimated at between 12 and 15 miles; for Deimos the figures are from 6 to 7.5 miles. Analysis of their reflected light shows they lack atmospheres but because of their tiny sizes even the most powerful telescopes reveal nothing as to their surface characteristics. Even their shapes are unknown although there has been some speculation they may be irregular in form.

While the moonlets are too small to produce any total eclipse of the Sun for a hypothetical observer on Mars, they deliver partial eclipses wholesale. Phobos causes some 1,300 of these annually, with Deimos adding about 120 more.

The pair are also eager-beavers about whipping through their four phases from "new" to "full"—a process which takes the Earth's Moon 29½ days. Phobos gets through more than half that cycle between each rising and setting. Deimos does even better; in moving from one horizon to the other it goes through all four phases twice.

Since they accompany the planet named for the ancient god of war, Professor Hall called them after two of that deity's mythical attendants—Phobos (Fear) and Deimos (Panic).

/ / /

/// P. S. for Los Angelenos. One astronomical theory on the constant cloud cover which hides the surface of the planet Venus from the view of earthlings is that this atmospheric shroud consists both of fine dust particles along with possibly drops of oil in place of the suspended moisture our atmosphere contains. The scientists conclude that upon further investigation it may be established Venus is "draped in a kind of perpetual smog."

—WILLIAM A. KINNEY

FLIGHT INTO DANGER

Coney didn't see the tree until it was too late.

by TSgt. Harold L. Craven
Airman Staff

WHEN the Chief of Air Service, Maj. Gen. C. T. Menoher, announced in January 1921 that an attempt would be made to cross the United States in less than 24 hours he caused considerable excitement among Air Service pilots. The announcement stated that two planes would be used, one flying west to east and the other from east to west, but only one pilot, Lt. Alexander Pearson Jr., was named. Who the second pilot would be was anybody's guess and a number of aviators bypassed channels and applied directly for the assignment.

There was no doubt as to Pearson's qualifications. He was an experienced cross-country pilot, one of 10 participants in the transcontinental reliability and endurance test of the previous October who had completed the roundtrip between New York and San Francisco. Although Lt. B. W. Maynard had won the east-west and roundtrip races and Maj. Carl Spaatz had won west to east honors—on the basis of total elapsed time—Pearson had made the roundtrip in the least actual flying time, 48 hours, 37 minutes, and 16 seconds. It was speculated that either Spaatz or Maynard would be selected to fly the second plane.

Speculation ceased January 15 when the March Field, Calif., *Fly Leaf* announced that Lt. William D. Coney would make the west to east flight with a single stop en route, at Fort Worth, Tex. According to the *Fly Leaf* the night flight from San Diego to the Texas panhandle would be the first air trip of its kind ever attempted by an American airman. Lt. Pearson, the story said, would make two stops on his flight from Florida to California, at Houston and El Paso.

Coney's military service up to this time had been somewhat less spectacular than that of Lieutenant Pearson, but he was nonetheless highly regarded by his superiors and his fellow aviators. He had been commissioned three years earlier following pilot training in Pennsylvania and was on overseas orders when the World War ended. He then served briefly with the information group, Office of the Chief of Air Service. After that assignment he participated in patrol flights along the Mexican border and as a forest patrol pilot in the Pacific northwest. He had 1,200 flying hours to his credit, mostly in pursuit planes and bombers.

Both aviators decided to use modified DeHavilland airplanes for the transcontinental flight. During an attempted flight from El Paso to San Antonio on February 10, Pearson, squadron adjutant with the 12th Aero Squadron at Douglas, Ariz., ran into trouble with his DH4. He made a forced landing, shortly after takeoff, in a canyon south of the Rio Grande in Mexico. After three days of traveling on foot and horseback, he finally reached civilization and told reporters:

"The worst part of this experience is that it cost me my chance for the transcontinental. Now there isn't a chance in the world of getting the plane out of Mexico in time for the flight."

Coney, meanwhile, was in California preparing for the flight which was to begin at Rockwell Field, San Diego, Calif., and end at Pablo Beach, Jacksonville, Fla. At Mather Field in Sacramento, he had selected a practically new DeHavilland equipped with a Ford Liberty engine.

Under Coney's supervision the wings were removed and carefully inspected for weak points in brace wires and ribs. Next the two cockpits were removed, and in their places, in the order named, were placed one 103-gallon gas tank, two 82-gallon gas tanks, a new in-

strument panel, and a new pilot's seat. Two 12-gallon oil tanks were fitted under the engine, well up inside the pan. At 100 miles per hour and a consumption rate of 20 gallons of gasoline and six quarts of oil per hour, the plane now carried sufficient fuel and oil for more than 13 hours in the air—adequate for the trip's longest leg of 1,170 miles.

Test Flights

During a series of test flights Coney found that the plane, fully loaded, was somewhat sluggish at high altitudes, incapable of flying faster than 85 miles per hour, and consumed fuel at the rate of 25 gallons per hour. More modification was necessary. The carburetors were changed and carefully adjusted, and as an added safety factor, another gas tank, with a 20 gallon capacity, was installed under the pilot's seat. The oil supply was also increased by replacing a 12-gallon tank with one holding 23 gallons. Sunday, February 20, the final test and tune up were finished, and the two compasses, one Army and one Navy, were swung.

The flight was scheduled to start at 6:30 p.m. February 21. Coney decided to spend the day sleeping but the excitement of the forthcoming event kept him awake. He arose at 1:30 p.m. during a heavy rain storm. The clouds were black and very low and it appeared that his takeoff might be delayed. Final compass adjustments were made during the heavy downpour. Shortly before seven o'clock a hole appeared in the overcast and the lieutenant taxied the plane into takeoff position. He shoved the throttle forward and the DeHavilland moved ahead. The wheels left the ground at 7:03 p.m. after a fairly long run. Coney circled the field once then started picking his way through the rain clouds. In a half hour he was under a bright full moon.

Directly below, the Coast Range Mountains were entirely invisible beneath the heavy cloud cover, and the lieutenant suddenly developed a high regard for the new type seat-pack parachute beneath him. At 7:55 he caught a glimpse of the lights of Calexico, Calif., directly ahead, and passed over the border town some 25 minutes later. At this point he should have been north of Calexico. He altered his course four degrees to compensate for wind drift and continued to a point south of Yuma, Ariz., arriving at 9:05.

The weather from Yuma east looked bad. A cloud blanket extended from the mountains up to at least 14,000 feet. Coney nosed the DeHavilland upward. He needed a minimum of 12,000 feet to clear the mountains northeast of Yuma. At 10:10 he was at 13,000 feet, directly on course. The engine was working beautifully at 1,500 r.p.m., but by this time there were clouds on all sides. The ground was visible only in small patches. Moon rays touched the plane at intervals and Coney saw that another 1,500 feet would put him above the clouds. He began a slow climb to reach the top.

He was now at 15,000 feet, climbing gradually, and the clouds below were heavier and thicker. At 11:25 he encountered a snow storm at 16,000 feet. Hoping to fly through in a short time he stayed on course rather than lose time trying to go around. In the midst of the storm the compass, which Coney also used as a bank indicator, began to act strangely. It inclined to the left and the lieutenant tried to correct with the controls. The control stick moved easily—too easily, Coney thought, and the compass continued to lean. Suddenly he felt weightless for an instant and the compass made a number of revolutions, became quiet, and remained inclined to the left. The air was extremely rough now, there was no visibility whatsoever, and the plane's heavy load added to the problem of maintaining balance. The compass stopped leaning and Coney put the DH4 into a shallow glide toward the southeast where he had seen thin white clouds before entering the snow storm. Soon he was out of the snow but sandwiched between two cloud layers at 10,000 feet. The mountains ahead were almost touching the upper cloud layer while the foothills appeared to be enveloped in rain clouds.

Coney headed toward the mountains hoping to pass between the peaks, but just before reaching the ridge he struck a downcurrent of air that cost him seven or eight hundred feet of altitude. He shoved the throttle full ahead, hoping to regain the lost altitude, but the DeHavilland wouldn't climb. Turning sharply off course he headed north for 10 minutes, found a hole in the clouds below him, and descended to 6,000 feet. From this point on he made careful note of every deviation to the right or left of his course and would fly in the opposite direction long enough to correct for the detours.

Heavy Rainstorm

Now he was below the bottom layer of clouds, flying through a heavy rain storm that required throttling back to 1,380 r.p.m. to save the propeller blades. He got through the mountains by choosing the largest passes or canyons he could see, hoping he would not find the exits blocked by peaks.

By midnight Coney was out of the worst mountains and the rain. Back on course, he climbed to 10,000 feet. The clouds were bunched into heavy banks and he flew over and under them. A heavy cloud center loomed ahead and he toyed with the idea of boring through it, then played it safe and went around and was startled to see a lone, snow-capped peak less than 100 feet away, touching the cloud.

The clock on the instrument panel indicated 4:30 a.m. when the first streak of dawn appeared. Then the country below began falling away into barren foothills that appeared safe and friendly after hours among the rugged peaks. Daylight came and Coney dropped to 4,500 feet. Bronte, Tex., was just ahead.

The Liberty engine sputtered momentarily, then cut back in again and continued operating perfectly. A few seconds later it began cutting out intermittently and Coney began looking for a place to land, as he switched on the reserve fuel tank under his seat. The engine quit altogether and Coney spiraled down toward a large wheat field, landing smoothly.

In 40 minutes Coney had 65 gallons of fuel in the front tank and the engine running. The DH4 roared down the field, lifted off easily, and attained some 20 feet of altitude, when the engine cut out entirely. Coney landed straight ahead. He climbed out of the cockpit, checked the engine and discovered that gasoline had not been reaching the front carburetor. From a nearby farmhouse he telephoned Love Field, at Dallas, to ask for assistance. Maj. H. H. C. Richards, commanding officer there, and E. C. Economy, an aviation ignition specialist, flew to the lieutenant's aid, arriving at Bronte in mid-afternoon.

The three men removed the rubber connectors of several fuel lines and blew them out. This was completed before dark and reassembly was accomplished on the following morning. Coney, greatly disappointed at having lost his chance to complete the transcontinental flight within a 24-hour period, took off at 10:48 a.m. and arrived at Love Field at 12:35 p.m. While mechanics there went over the engine, Coney unsuccessfully tried to sleep.

By 10 p.m. all was in readiness. Weather and wind reports showed fair conditions all the way to Jacksonville. At 10:14 Coney took off.

Weather was exceptionally good and at midnight he passed over a large lake which he took to be south of Shreveport. The country below then took on the appearance of a vast swamp so he climbed from 3,000 to 6,000 feet to allow a better choice of landing spots in the event of further mechanical difficulties. At 12:45 he neared Lake Catahoula and here plotted a new course to correct for drift. On the new heading he passed over the Mississippi River just south of Natchez, Miss., at 1:10 a.m.

Coney sighted the Gulf of Mexico at 2:30 a.m. and a quarter hour later recognized the lights of Mobile, Ala., one hour ahead of schedule. Shortly thereafter a section of his navigation chart blew out of the cockpit. From there on the lieutenant would have to rely on his compass alone.

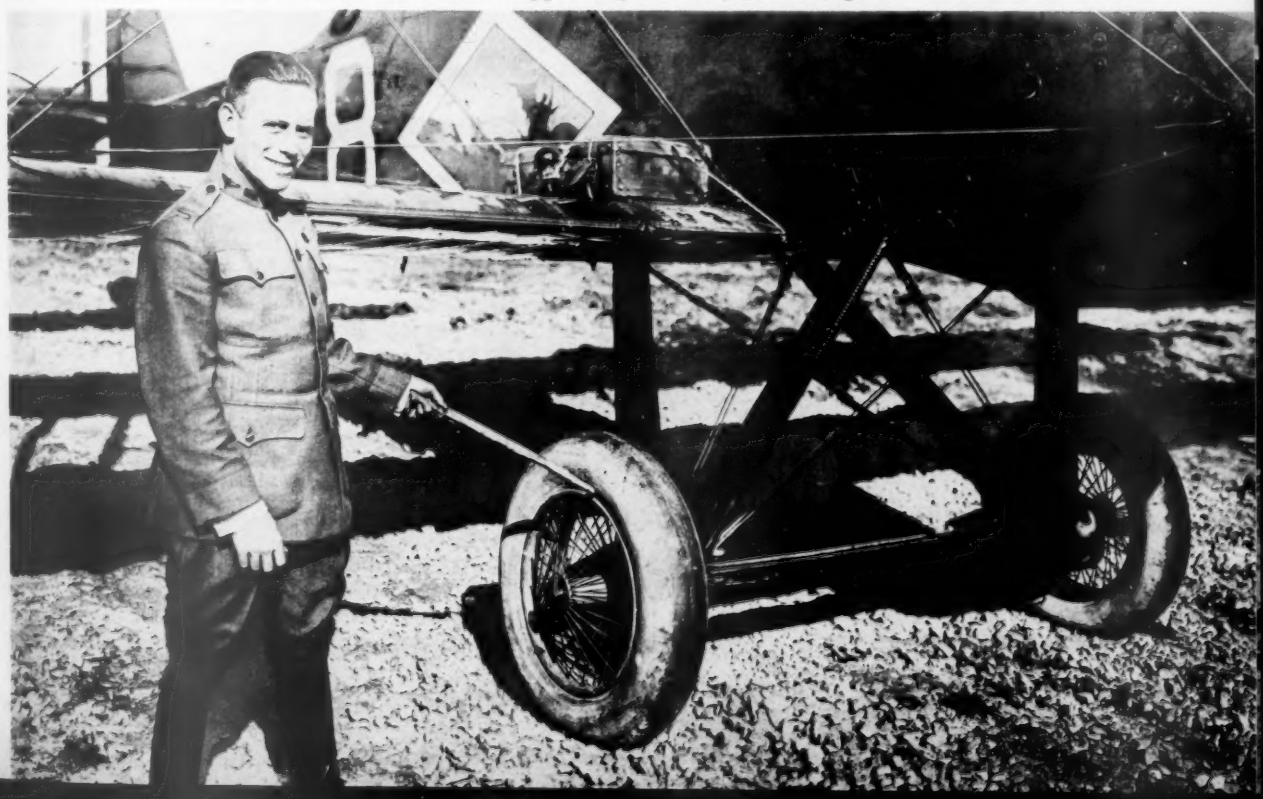
At 6:00 a.m. the sun appeared and Coney was relieved to see the St. Johns River dead ahead. At 6:10 he sighted Jacksonville almost directly below. He circled once toward the Atlantic, then made his landing approach. As the wheels touched down he glanced at the clock on his instrument panel. It was 6:27 Dallas time, 7:27 Jacksonville time.

Second Attempt

The flight had set a new transcontinental record, having been completed in exactly 22 hours and 27 minutes flying time. This was not, however, the goal Coney had been trying to attain. He vowed to make another attempt at crossing the Nation in 24 hours elapsed time.

Approval for another flight was given and Coney hopped off from Pablo Beach at 1:40 a.m. on March 25. He had a fair flight until he struck fog banks along the Mississippi River shortly after daylight. Then, not entirely certain of his position, he flew low to seek a familiar landmark. At approximately 7:25 a.m. the DeHavilland's engine failed and the lieutenant was

1st Lt. William D. Coney, pioneer transcontinental pilot, used a modified DeHavilland biplane in his attempt to fly from California to Florida in 24 hours. The weight of additional fuel needed for the flight required installation of oversize wheels and tires. Note suitcase strapped in place ready for the flight.



forced to make a landing under conditions that approached zero visibility. He glided down at the minimum speed necessary to maintain flight, reasoning that a crash landing at slow speed would be better than a high-speed crack up. The plane was close to the ground now, gliding through the fog. Coney didn't see the tree ahead of him until it was too late to get around it. When he regained consciousness he was in the arms of Mr. and Mrs. Mose Lanier who were carrying him toward their farmhouse at Crowville, near Monroe, La.

When telegraphic news of the crash reached the office of the Chief of Air Service an officer was sent to Crowville from Love Field to assist Lieutenant Coney in every way possible. Coney's mother, Mrs. E. F. Coney, his brother, E. F. Coney, both of Brunswick, Ga., and his aunt, Mrs. W. H. DeVoe of Jacksonville, Fla., were summoned to his bedside. Before his death on March 30, the lieutenant explained in detail what had happened, adding:

"My keenest regret is that I have failed."

He predicted that a transcontinental flight within a 24-hour period would be accomplished soon, probably in another modified DeHavilland airplane.

Seventeen months later, on September 4, 1922, another Air Service officer, Lt. James H. Doolittle, flew from Pablo Beach to San Diego in a rebuilt DH4B, traversing the 2,163-mile route in 21 hours and 20 minutes flying time—in less than 24 elapsed hours. Another aviation milestone had been passed and aviators began looking toward another goal: a nonstop flight across the continent.

How to Raise Juvenile Delinquents

The police department of Houston, Tex., gives to the parents of each juvenile who runs afoul of the law 12 rules for raising a juvenile delinquent.

1. Begin with infancy to give the child everything he wants. In this way he will grow up believing the world owes him a living.

2. When he picks up "bad" or "dirty" words, laugh at him. That will make him think he is "cute." He will run off and pick up some words that will blow the top off your head.

3. Never give him any spiritual training until he is 21, and then let him decide for himself. By the same logic, never teach him the English language, maybe when he is old enough he will want to speak Bantu.

4. Praise him in the presence of all the neighbors; show how much smarter he is than all the neighbors' children.

5. Avoid the use of the word "wrong." It may develop in the child a "guilt complex." This will prepare him to believe that when he is punished later on for stealing cars that society is "against him" and that he is being "persecuted."

6. Pick up everything after him: his shoes, his socks, his clothes. Do everything for him, so that he will be experienced in throwing burdens on others.

7. Let him read anything he wants. Have no concern whatever for what goes into his mind. Provide him with Lily cups for his lips, but let his brain drink out of a dirty container for words and ideas.

8. Quarrel frequently in the presence of your children. In this way they will be prepared for broken homes later on.

9. Give him all the spending money he wants; never let him earn his own.

10. Satisfy every craving of the child for food, drinks, and everything that has to do with the sense of taste and touch, gratify his every sensual desire.

11. Take his part against policemen and neighbors. They are all prejudiced against your child.

12. When he gets into real trouble, always defend YOURSELF and say, "I never could do anything with him."

Desert Wings, Edward AFB, Calif.

A PAGE FOR THE ONE-HITCH AIRMAN

For the man who doesn't intend to stay in, here are some facts on what he can expect in civilian life during the next 10 years.

There are thousands of young men in the Air Force who have no intention of sticking it out for longer than the duration of one hitch. To hear them tell it, they wouldn't reenlist if you gave them the base on a platter. The record shows that many of these people change their minds when they arrive at the point of decision. Then again, there are many others who call it a day at the end of four years and pack the uniform away in the attic.

There is nothing wrong with being a one-hitch airman. As a group they are a useful and necessary part of the pattern, and have always occupied a place in the military picture. Some of these young men are outstanding. There are others, however, who feel that they have done well enough just by keeping out of trouble for four years.

The trouble is that too many youngsters regard the four years in uniform as a period of "marking time," a sort of offside interlude that must be completed before settling down to the serious business of building a civilian career.

The U. S. Department of Labor publishes some statistics which have an interesting bearing on this business of building a civilian career during the 10 years beginning January 1, 1960. The number of people gainfully employed in the United States is expected to increase from the present 73.5 million to about 87 million. This means that the expanding economy will provide that number of jobs, and a tremendous increase is anticipated in the demand for professional and technical skills.

Already there are more white-collar positions in the country than blue-collar jobs, and the white-collar category is expected to lead the parade of expansion during the 1960s. Engineering, the sciences and related fields, and the health and teaching professions are prime examples of expanding employment areas under this heading.

At the same time, major areas of growth can be expected in the blue-collar fields. The technician, the man who supports the engineer and scientist, will show substantial employment gains in the 10 years ahead. In private industrial research there was an increase of 600,000 or 25 percent in the employment of technicians during a recent three-year period. Further, the skill level of all occupational fields is expected to be considerably higher than at present.

To determine the effect of these facts on the up-coming generation it is necessary to glance at the age grouping of this gigantic labor force of 87 million people. About 50 percent of the 13.5 million increase will take place in the youngest age group of workers, 14 to 24 years. This means that there will be 6.75 million *more* young people entering the labor force than the norm for the past 10 years.

At the other end of the scale, the next biggest increase will be reflected in the age group of 45 and older as 5.4 million *additional* persons phase out of the highly productive 35-44 group into the older bracket. A modest increase is expected in the group 25-34, but actually there will be a decline in the prime category of 35-44 because of the low birth rate during the first part of the depression decade of the 1930s.

Thus the 1960s will see an increase in skill level requirements all across the board, but the preponderant increase in the labor force will be among relatively inexperienced people at the beginning of their career development. At the same time there will be a deficit in the critical 35-44 age group from which the highest skills are usually drawn.

This places the young one-hitch airman in a particularly fortunate position—if he makes full use of the training available to him in the Air Force. And even if he decides to abandon his one-hitch status by reenlisting, the 1960s are filled with promise. Many of the men who came in about the time of Pearl Harbor are ready to step aside, and the scanty birth rate of the 1930s will have its impact on the Air Force at about the same time. A trend is indicated in the direction of a young man's Air Force.

The man who can raise his head above the crowd during the next few years is bound to move up quickly on the ladder of his chosen career since the most critical problem area is likely to be at the top. In a very real sense, therefore, education, training, and early skill development are the factors which will determine the success of a career built in the 1960s. The man who makes the most of his four years in uniform by taking advantage of educational and training opportunities offered can face the competition of civilian life with a head start on his neighbors. For those who decide to stay, the first four years are important. In either case, the cards are stacked in favor of the brighter young men of this generation.

—TSgt. J. K. O'DOHERTY

BASELINE USAF

ANDRES CUELLO DIES

Andres Cuello is dead. The 11-year-old Spanish youngster who won the hearts of American airmen stationed at Zaragoza AB died of leukemia Nov. 5.

Last month "The Airman" published a three-page story about the Spanish boy's fight against leukemia and how Air Force personnel had planned an early Christmas party for him.

There wasn't time to give Andres a Christmas party, but his courage will long be an inspiration to those airmen who tried to help him happily live the last, heart-breaking months of his life.

SANS ROD AND GUN

RAF Station Alconbury, England--Local Isaac Waltons are gathering to protest a newcomer to their ranks. It isn't that they don't approve, it's simply that he usually outfishes them.

Object of the protest is 7-year-old Bubby, cocker spaniel of SSgt. Luis Fernandez of this base's 7560th Air Base Group.

Bubby has proved to be unique. Somehow, with paws and jaw, he has taught himself to fish and, according to his master, his efficiency is downright frightening.

His method is simple. He quietly waits for significant movement in the target water area, then plunges into the lake or stream, traps his quest under a paw, and gently gathers it into his jaws. The quarry is then dumped at his master's feet, ashore.

The principal problem here is who should get the necessary license--master or mastered?

IN SESSION

George AFB, Calif.--Rapping of the gavel is emanating from a new local source these days. Officials at this station have established a new traffic court.

Convening twice monthly, the court is presided over by SMSgt. William E. Lawson, assisted by five other base master sergeants. Its authority is limited to passing recommendations for punishment for local traffic offenses to the base commander.

All sentences are levied in accordance with AFR 125-14, Motor Vehicle Traffic Supervision, and with local traffic publications. The base commander may approve the court's recommended action or change the penalty as he deems advisable.

ADVANCED STUDIES

RAF Station Wethersfield, England--Mrs. Vicki Myers, wife of Lt. Barton Myers III, pilot with the local 77th Tactical Fighter Squadron, has been accepted for study at one of England's outstanding music schools.

Mrs. Myers recently entered Britain's Royal College of Music in nearby London and is concentrating on advanced piano study during the current year. She is one of only four Americans whose applications for this highly regarded school were accepted. Part of the entrance requirement consists of an intricate audition on the instrument with which the student wishes to specialize.

An indication of the college's selectivity is evidenced by the fact that fewer than 200 students are accepted annually.

"If we are to have superior weapons and the proper methods of employing and controlling them, we also must have a high order of teamwork—on a National scale. Many of you have seen the Air Force Thunderbirds *in action. The maneuvers they accomplish are only possible because each pilot flies his own slot with skill and precision—yet all four perform as a team. Their demonstration would be a dangerous farce if each went his own way."*

—GENERAL THOMAS D. WHITE
to the Defense Orientation Conference Association

Glory to God
in the highest,
and on earth peace,
good will toward men.

St. Luke 2:14